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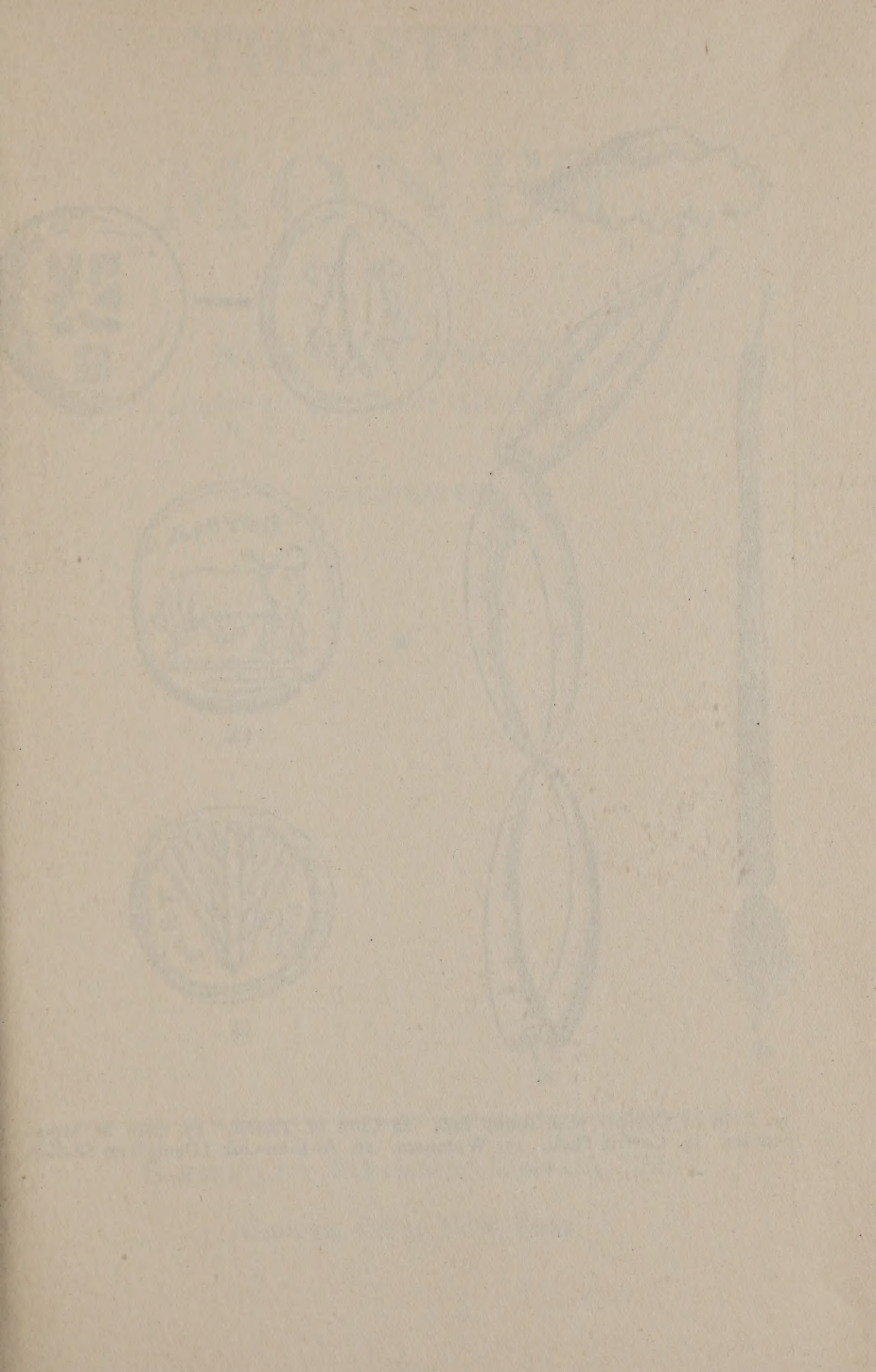
THE STORY OF MONEY



11. Coin of Cyzicus with tunny fish. 12 Coin of Thurii. 13. Coin of Metapontum. 14. Cowrie Shell. 15. Wampum. 16. Al-li-ko-chik (Dentalium Shells).

THE STORY OF MONEY

OCT 26 1964
ZOOLOGICAL SOCIETY

By
NORMAN ANGELL
Author of "THE GREAT ILLUSION," *etc.*

ILLUSTRATED

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PREFACE

THIS is not a treatise on Monetary Theory, nor is it a history of the technical developments of Monetary practice or of Banking. It is a story, written for the layman, of man's experiences with the device of money: some of the outstanding experiments that he has tried with it, and the results of the experiments; some of the ideas he has had concerning it; some of the mistakes that he has made about it. It is an attempt to tell the story of money in its social relation, to show what money has done to human society, the problems which it has solved and which it has created; and to show briefly, in a final chapter, the nature of the main monetary and banking controversy of the present-day, by indicating where the various authorities stand on the problem of the stabilization of the price level in its relation to our present needs and methods. That chapter is mainly an anthology of the great monetary controversy of the day.

It is a layman's book throughout; very deliberately the more specialist and technical aspects of the subject, other than those indispensable to an understanding of fundamental issues, have been avoided.

There is much quotation from other authors, largely because, in all the controversial aspects, the author has attempted to present the debate as it stands to-day rather than to give his own views.

I am indebted in several of the chapters for valuable collaboration. The outline of Banking History in the United States (Chapter XI) has been prepared by Mr. Louis Rasminsky, B.A., of the University of Toronto; the chapter on the monetary breakdown in Central Europe (Chapter XII) mainly by Mr. Charles Hallinan (author of "American Investments in Europe"); the summary of the Debate on Monetary Reform (Chapter XIII) by Mr. H. V. Hodson, B.A.,

Oxford. For invaluable assistance in the collection of pictures and illustrations I am indebted to Miss Martha Kelley, of Radcliffe, and for help in the preparation of the Manuscript to Miss Barbara Hayes.

Finally, my thanks are due to the officials of the British Museum for providing facilities for the reproduction of Figs. 1, 2, 3, 4, 8, 9, 10, 22, 29, 32, 33, 34, 35, 36, 37, 44, 45, 46, 47, 48, 49, 50, 52 and 53; and to the officials of the Public Record Office (London) for assistance in the procuring of Figs. 28, 38, 39, and 40. Professor A. W. Kirkaldy of Nottingham has kindly permitted the reproduction of the Robert Owen Labor Notes in Figs. 5 and 6. I am indebted to Messrs. Spink and Son (London) for authority to reproduce Figs. 17, 18, 19, 20 and 21; and to the Council of Foreign Bondholders (London) for Fig. 51. The Cambridge University Press have kindly permitted the reproduction of Figs. 7, 11, 12, 13, 14, 15, and 16 from *The Origin of Metallic Currency and Weight Standards* (W. Ridgeway); and of Fig. 23 from *The Evolution of Coinage* (G. Macdonald). To John Murray I am indebted for permission to reproduce Figs. 24, 25, 26, and 27 from *A Short History of Coins and Currency* (Avebury), and to F. A. Acland for authority to reproduce Figs. 41, 42, and 43 from *Documents Relatifs à La Monnaie, au Change et aux Finances du Canada sous la Régime Français* (Adam Shortt). Finally, the Clarendon Press have kindly consented to the reproduction of Fig. 30 from *History of Ancient Coinage* (P. Gardner), and of Fig. 31 from *Historia Numorum* (B. V. Head).

To all who have thus made possible the securing of illustrations, I wish to express my thanks.

The method of handling footnotes and references is a compromise. Where a note is indispensable immediately for elucidating any passage in the main body of the text, it has been given at the foot of the page involved; but where the reference is not needed at the moment of reading, it has been relegated to the end of the book in order not to encumber the pages with too numerous references.

N. A.

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CHAPTER II

THE MONEYLESS CIVILIZATIONS

There have been stable and elaborate civilizations without money. Social units organized on a "household" basis, even though they have intricate division of labor and highly specialized callings, can manage without either money or barter, since there is no exchange in the ordinary sense. Roman fundi, mediæval Manors, Monasteries, Feudal estates, early agricultural tribal communities, certain types of early frontier farms, are forms of such practically moneyless organizations. Much of Europe during a large part of the middle ages lived on a basis of a "natural" as opposed to a money economy. For three thousand years Egypt had no coins and though ingots of precious metals may have served the purposes of money in negotiations between kings and great merchants, money was unknown to the common people and did not enter into daily life at all. China at some periods shows a similar record and never coined the precious metals. But if an elaborate civilization is to

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[BY LOUIS RASMINSKY, B.A., TORONTO]

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[BY H. V. HODSON, B.A., OXFORD]

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THE STORY OF MONEY

CHAPTER I

WHY THE STORY OF MONEY CONCERNS US

Without the use of the Money device, modern life as we now know it in America, could not go on. Yet, though we all use this tool, few of us have taken the trouble to learn its mechanism or nature, and our education normally neglects it altogether; with the result that monetary policy is the victim, again and again, of public ignorance; and vast waste and losses are occasioned. We have recently seen the whole apparatus go to pieces over much of Europe, and whole classes robbed of their possessions thereby. Money can never be a safe and dependable device in a society made up of people who are ignorant of its nature. We are now facing a monetary revolution. How the story told here may serve as an introduction to a knowledge becoming every day more necessary.

CHAPTER I

WHY THE STORY OF MONEY CONCERNS US

MONEY has become perhaps the most indispensable of all the tools which we use in our urbanized modern life.

We who live in cities or in citified communities, which nearly all of us in the Western world now do, could not exist a day without employing, or have others employ for us, this device, either in the form of the coin or the currency which we pass for our food or our car fare, postage stamp, theater ticket; or in the form of the complex credit arrangements which have developed from the use of money. This life that we lead simply could not go on if we had to turn to barter: if the farmer had to persuade the railroad ticket agent or the taxi driver to accept a calf or a load of hay as payment for his fare, or the dentist persuade the same railroad that he would well and truly fill the President's teeth if only he, the dentist, could now ride to Buffalo; or the maker of fiddles or steam excavators or compasses persuade the barber to shave him in return for a splendid compass or an incomparable steam shovel to be delivered at some future date. Time was when barter answered, or cattle could be money; but to-day cattle in the subway would not help solve the traffic problem. Further, it would be hard to settle how many miles a man should be carried for a given number of cows; or how many shaves performed for a given kind of compass or chronometer.

That is an old story, this impossibility of barter, the absolute need of the money device for the modern world. But it is a story whose lesson we still all but completely pass by. Our usual attitude towards the money tool as we now know it would imply that it has been fully tested, that it does its work well enough, that its possibili-

ties have been completely explored, that we need worry about it no more. We take it so much for granted, assume so unquestioningly that our democracies will have no vital issues to decide about it, that it is the one subject which we leave out of our school curriculum.

The child must learn the rules which govern a speech that died a thousand or two thousand years ago, and even that "the subjunctive mood is used in a subordinate proposition when both contingency and futurity are expressed, or when the contrary fact is implied." He must know about the exploits of certain tribal heroes, exploits curiously selected; about the sins of dead kings, the dates of long-past battles—but of the money in his pocket, which will concern him every hour of his life, which has given rise to an elaborate mechanism of finance and credit that has become the very core of his complicated and vulnerable civilization, compelling for its control the creation of intricate laws and direction of policies for which he, the citizen and voter, is ultimately responsible—about this thing, as distinct from Latin verbs and the cut cherry trees, the dates and battles, he learns as a rule nothing whatsoever. It is still true to say that in the case of ninety per cent of our elementary and high-school children they will not hear one word about it from the day that they enter school to the day they leave.

The assumption that we do not need to give the young some notion of this thing seems to be based on the belief, either that we run in no danger from ignorance, or that people get to know "naturally," by common sense, all that is necessary about this subject. "All a man needs to know about money," we are apt to say, "is how to make some."

Yet the truth is—and we have had a dramatic, a monstrous demonstration of it this last ten years—that if we are content, each to know only "how to make some," we shall find ourselves one day having placed it all in jeopardy, of seeing it perhaps utterly vanish. That thing, which sounds so fantastic, has actually happened this last few years, in a civilization as stable as America's and economically as highly developed, in the civilization, that is o

Germany and Austria (and in only less degree of France, and Italy and Britain), where millionaires have had to learn that the safety of any man's property in our days is dependent upon the wisdom of his neighbors, the ideas that they entertain about such things as money and economics.

A very large proportion of the propertied orders in Europe, have seen their money melt away, in many cases utterly vanish, because the public, they themselves that is, were ignorant of the nature of money and pursued wrong policies with reference to it. The story is told in one of the chapters of this book.

Those people have seen themselves dispossessed, sometimes down to the last penny, by an economic revolution; a revolution not engineered by Moscow or precipitated by Socialist agitators, but arriving as the direct result of policies pursued by "law and order" governments, by the guardians of wealth and commerce. Speaking broadly, all those whose property consisted in titles to money, in bonds, debentures, annuities, insurance policies, pensions, have seen it in part or in entirety wiped away. No confiscatory scheme of a Socialist government could have done it more completely. The revolution fell with particular hardship upon the elderly, the middle orders, the only moderately well-to-do, the professional classes. And it was the direct result of policies, in part political it is true, but also economic and financial, pursued by these orders themselves, by bourgeois, capitalist, property-owning classes.

If we enter the plea that the result was due, not so much to the ignorance of those who suffered, as to the circumstances of war, and, in the case of Central Europe, where the collapse was worst, to defeat, we are brought back nevertheless to the factor of public ignorance and misunderstanding. For the worst chaos—that of the defeated States—was in large part due to the policy pursued by the property owning, Conservative classes in the States opposed to Germany, in France, Britain, America, a policy which defeated the ends those States had in view—the collection of money from Germany. The Reparations embroglio, with its accompaniment of delayed

settlement of Europe and consequent economic loss, was rendered insoluable for years by the inability of public opinion to grasp the essential facts. (That history also is touched upon in a chapter of this book.) The worst difficulties arose because, in the Allied countries also, popular conceptions of the nature of money were so hazy, so fallacious, as to make the story of the early demands upon Germany read like a fantastic burlesque.

The financial revolution in Central Europe which confiscated property to an extent which no Socialism could have exceeded, was due to a riot of inflation. Great Britain, having been in part responsible for this policy which made it impossible for her to get from Germany what she might otherwise have got, and having before her eyes the demonstration of what may result from bad monetary policy, pursues later a course of deflation which in the opinion of some of the ablest of her industrialists and economists has had results which, while not so painful at the moment, may in the long run be more disastrous even than the policy of inflation has been for Germany. To an economic situation worse than Britain has known since the beginnings of the industrial revolution, to difficulties of unemployment and high taxation occasioned by the loss of her former industrial supremacy and post-war adjustment, have been added the terrific burdens involved in a policy of currency deflation in a country which carries an enormous public debt.

The point of this post-war story in Europe is that it is not, except in the dimensions of the losses involved, a new story at all. It is an exceedingly hackneyed one in financial history. The bad monetary policies, the upheavals, the losses, the wrecking of the financial structure, and, through it, much of the economic order, is something which has occurred repeatedly in the history of all modern States including this. We seem to learn nothing from experience in this respect. Again and again when governments have to deal with grave crises like those of war, or revolution and industrial depression in which the monetary system is involved, they can usually be

depended upon to apply the worst policy, either because legislators are themselves ignorant or unprepared, or because the public clamor for the worst as against the better.

Man has made, alike in the more remote as in the quite recent past, some of his worst mistakes in handling this ancient money device; he continues to make them. It is not merely in times of crisis that the mistakes are made. It is not only when Free Silver, or the Federal Reserve policy, or some "plot of the money power," happens to be an issue of politics, that the ordinary man's views on the nature of money bear vitally upon public interest. Not only does his view often determine such questions as whether there is too much credit or too little; whether the Federal Reserve policy in the matter of Stock Exchange speculation was good or bad, but such permanent problems as taxation,—inheritance, super-tax, the financing of municipal and national public utilities, Trust legislation, payment of foreign debts, to say nothing of the tariff, are determined ultimately by his opinion. Apart from the fact that money has played so large a rôle in human society that some knowledge of its processes is indispensable to the understanding of any social problem whatsoever, our whole civilization is now dependent upon the smooth working of a credit and banking system, the directing policy of which is ultimately in the hands of the ordinary citizen, the voter, investor, business man, Trade Unionist, or politician these elect. The commonest and most practically mischievous errors in these matters are those due directly or indirectly to misconceptions concerning the nature of money.

The pages which follow indicate how frequent, how recurrent are certain types of error; how much America has been cursed by them in the past; and may be again.

To bring home this fact—that the money we own may take wings to itself as the result of well-intentioned public folly—is the first step perhaps to wisdom, in that, more probably than anything else, it may set up the desire for knowledge.

The errors in this field are so recurrent largely because the

common assumption is that money is little affected by public opinion about it; that it is something fixed and stable like gold or silver which our action will not alter.

A great financier and business administrator, as well as a great economist—Sir Josiah Stamp—said recently (and as Professor Irving Fisher has said often of late), that the average business man does not know what you mean when you speak of the fluctuating value of money. "A dollar is a dollar," and prices may go up or down but the dollar remains immutable. "A statement after dinner," writes Sir Josiah,[1] "that the change in the price level in the last three years has increased the burden of the national debt a thousand millions * or added an invisible shilling to the income tax, is treated much on the same level as an interesting anecdote—it is not challenged, it simply does not 'bite.' I do not believe that more than one business man in a hundred, on opening his newspaper, observes the monthly fall in the price index with a sinking heart, or any consciousness of its effect on the nation's fortunes. When I have said quite seriously, as I have done on a number of occasions, that the problem of the price level is the most important single problem of our age, I have been accused either of exaggeration or flippancy. 'What about trade depression in the basic industries, unemployment, labor unrest, class hatred, high taxation and the rest?' My answer is that the problem of the price level is fundamental to a solution of them all."

He goes on:

> When a provision was inserted in the Dawes' Plan for altering the German annuities if the gold price level should change, many people, including, perhaps, some of the Committee members themselves, looked upon it as a harmless concession to the academic mind, and not as something vital and predominant,—perhaps in the long run, the most far-reaching novelty in international relations. If one were to make a similar provision in a wage settlement or a settlement of Inter-Allied Debts, one would be suspected of "monkeying" with the immutable.

* i.e. Five billion dollars.

H. G. Wells makes his hero Clissold say:

> In the course of my life I have met a certain sprinkling of bankers, and I do not think there is any sort of human being more marvelous and incredible. They take money for granted as a terrier takes rats; when they see it, they go for it; but they are absolutely immune to any philosophic curiosity about it. . . . They are individualistic in their aims, the sense of being a possible part in one complete, social organization has not come to them. All these characteristics are the characteristics of immaturity.

That strikes one as more than a thought too sweeping. But listen to what Sir Josiah Stamp, himself a financier, in driving home the points already made in the passages quoted from him, has to say:

> As we go on making civilization more complex, we make it more dependent for its survival upon a single factor that we treat empirically and fatalistically. Compared with ten years ago the number of people who catch a fleeting glimpse of the meaning of the problem when they are thinking of it specially, is increasing, but still it forms no real background to their minds and is lost sight of altogether when concrete problems are under discussion. With business men there is still a sneaking feeling that references to the price level or index numbers are academic and highbrow, not practical or immediate. They move unfamiliarly amongst its contentions, and feel uneasy as compared with the sureness with which they discuss comparative manufacturing costs or a fair wage, or sixpence off the income tax. When they listen to any close analysis of its problems, they claim curiously enough to be exempt from the necessity of understanding it, because they are essentially "practical." And yet it is the most bitterly practical of all questions.

The simple story revealed by these pages may do something to expose the fallacy of the idea that the money which the ordinary man has in his pocket or his bank is unaffected by general opinion, and to reveal the contrivance as one which can get altogether out of hand—and disappear—when ideas concerning it go astray.

Never was the need of a more general realization of that fact greater than at present, for we are rapidly moving towards a monetary revolution—the conscious, social, "artificial" control of the value of money.

The world is being pushed to that revolutionary step because money has not been in the past an efficient tool, and its inefficiency becomes continually more costly as the financial organization gains in complexity.

How greatly, in the view of historian and economist alike, money may, when "left to itself," or managed as we have managed it in the past, fail us, and how important (if that view be correct) it is for the general public to realize the fact, may be gathered from these statements:

It may well be doubted whether all the misery which had been inflicted on the English nation in a quarter of a century by bad kings, bad ministers, bad Parliaments, and bad judges was equal to the misery caused by bad crowns and bad shillings. Those events which furnish the best themes for pathetic or indignant eloquence are not always those which most affect the happiness of the great body of the people. The misgovernment of Charles and James, gross as it had been, had not prevented the common business of life from going steadily and prosperously on. . . . Whether Whigs or Tories, Protestants or Jesuits, were uppermost the grazier drove his beasts to market. . . . But when the great instrument of exchange became thoroughly deranged, all trade, all industry, were smitten as with a palsy. The evil was felt daily and hourly in almost every place and by almost every class, in the dairy and on the threshing floor, by the anvil and by the loom, on the billows of the ocean and in the depths of the mine. . . . The workman and his employer had a quarrel as regularly as the Saturday came round. . . . The helpless peasant was cruelly ground between one class which would give money only by tale and another which would take it only by weight.—*Thomas Babington Macaulay.*[2]

All variations in the value of the circulating medium are mischievous: they disturb existing contracts and expectations, and the liability to such changes renders every pecuniary engagement of long date entirely precarious. The person who buys for himself, or gives to another, an annuity of £100, does not know whether it will be equivalent to £200 or to £50 a few years hence. Great as this evil would be if it depended only on accident, it is still greater when placed at the arbitrary disposal of an individual or a body of individuals; who may have any kind or degree of interest to be served by an artificial fluctuation of fortunes; and who have at any rate a strong

interest in issuing as much as possible, each issue being in itself a source of profit. Not to add, that the issuers may have, and in the case of a Government paper always have, a direct interest in lowering the value of the currency, because it is the medium in which their own debts are computed.—*John Stuart Mill.*[3]

History has shown that apart perhaps from wars and religious intolerance no single factor has been more productive of misery and misfortune than the high degree of variability in the general price level. This may sound like an extravagant statement, but so far from being of the nature of demagogic outburst, it is clearly demonstrable from the course of events in various countries ever since money became an important element in the life of civilized communities. A stable price level is a thing to be desired, second only to international and domestic peace.—*Reginald McKenna,* Chairman (President of Midland Bank, Ltd.).

It has often been suggested that the supply of a nation's currency itself might ultimately be so adjusted as to fix the purchasing power of each unit of the currency to an absolute standard. In spite of the severe criticism to which this suggestion has been subjected, there seems no good ground for regarding it as wholly impracticable: but many long and tedious studies, stretching perhaps over several generations; and many tentative experiments moving cautiously toward the ideal goal, would need to be taken before any large venture in this direction could properly be made.—*Alfred Marshall,* in "Money, Credit, and Commerce."[4]

During this year (1921) millions of us were idle when we wished to work, billions of dollars worth of plant and machinery stood unused when the owners longed to start their furnaces, and what we wanted to produce we needed to consume. The edict of enchantment which forbade us to do what we wished was pronounced by the money economy. We are periodically mastered by this social machinery we have made, and stand idle and needy at its bidding. . . . Since the money economy is a complex of human institutions, it is subject to amendment. What we have to do is to find out just how the rules of money making thwart our wishes and to change them in detail or change them drastically as the case may require. On the contrary, the work of analysis is difficult intellectually and the work of devising remedies and putting them into effect is harder still. But one has slender

confidence in the vitality of the race and in the power of scientific method if he thinks a task of this technical sort is beyond man's power.—*Wesley C. Mitchell,* in "The Stabilization of Business." [5]

We should no longer have an appalling and endless number of strikes and wage disputes and tie-ups and traffic blockades; for almost every strike and wage dispute grows out of a changing level of the purchasing power of money, and if this level of purchasing power can be made fairly stable, a large part of our labor troubles, so called, will disappear. And with this would come a corresponding opening to all the talents of our inventors and discoverers and engineers and efficiency and production experts, giving them a wide-open opportunity to get at ways to enhance the man product per hour; to distribute the product more equably; to diversify and lighten human toil.—*Carl Snyder,* Economist Federal Reserve Bank.[6]

Labor disputes are rarely very serious, long extended, or disorderly, except when they have to do with compensation, and compensation disputes almost always arise when prices are rising.

Periods of falling prices give rise to demands for fiat money and Government subsidies of this industry or that.

Therefore, is it not the fundamental condition of industrial and national tranquillity that of a reasonable stability of prices, as from 1909 till toward the close of 1915?

I believe with Henry Ford that what the great body of our workingmen most desire is security of employment and an adequate wage that represents a fairly even and stable purchasing power.—*Benjamin Strong,* Governor Federal Reserve Bank of New York.[7]

The youth who can solve the money question will do more for the world than all the professional soldiers of history.—*Henry Ford,* in "My Philosophy of Life."

In view of the body of opinion reflected by such quotations as those above, it is plain that we are moving irresistibly towards the attempt to stabilize the value of money. However controversial some aspects of the monetary problem may be, that much is fairly beyond dispute.

But that we shall make the attempt thus to control money does not imply that we shall necessarily succeed. Attempts, in a fashion, have been made before; all sorts of monetary experiments have been made. They have usually ended in disaster. And the fact of the situation which is most insistent of all is that we cannot now "leave things alone." Does the advice so to do, which is sometimes proffered, mean that, for instance, the discount rate is never to be altered, that the Federal Reserve Board should be dissolved? We are compelled to "interfere" by the needs of day-to-day decisions. A very elaborate machine has to be kept running; something is always needing adjustment, and it makes a vast difference which lever is pulled and which knob pressed.

The present author does not enter into the debate as to the technical means by which good monetary policy can be secured, but a final chapter of this book puts before the reader a summary of the views of the chief economists of the world.

Plainly the story of man's experience with money, the experiments he has tried with it, the mistakes he has made about it, bear upon the new efforts that now he is obliged to make.

The author has attempted to make this story of man's past struggles with the monetary problems an introduction to the study of that problem as it is presented to the layman to-day.

An outstanding characteristic of the story is the antiquity of modern monetary problems, or the newness of the ancient. By noting the errors of the past and, with longer perspective, seeing something of the reasons which caused men to fall into them, we may add to the chances of avoiding them in our day, and of perhaps succeeding where the earlier experimenter failed.

CHAPTER II

THE MONEYLESS CIVILIZATIONS

There have been stable and elaborate civilizations without money. Social units organized on a "household" basis, even though they have intricate division of labor and highly specialized callings, can manage without either money or barter, since there is no exchange in the ordinary sense. Roman fundi, medieval manors, monasteries, feudal estates, early agricultural tribal communities, certain types of early frontier farms, are forms of such practically moneyless organizations. Much of Europe during a large part of the middle ages lived on a basis of a "natural" as opposed to a money economy. For three thousand years Egypt had no coins and though ingots of precious metals may have served the purposes of money in negotiations between kings and great merchants, money was unknown to the common people and did not enter into daily life at all. China at some periods shows a similar record and never coined the precious metals. But if an elaborate civilization is to exist without money it must be by rigid rules which rob the individual of freedom. If the individual is to be free and at the same time industrious, the money economy is indispensable—at least until men have become much wiser and more socially efficient than they happen to be at present.

CHAPTER II

THE MONEYLESS CIVILIZATIONS

Most textbooks on economics begin the explanation of money by showing the inadequacy of barter to any type of civilization founded upon the division of labor. Some of the inconveniences of barter, something of its impossibility to all but a savage state of society were indicated in the last chapter.

It is not merely a matter of the terrific inconvenience of having to exchange camels for bus rides, or ships for cigarettes or seats at a burlesque show, but of knowing how many rides or books or songs go to a camel or a ship when we have no third commodity in which to measure both articles of the exchange.

To us it looks easy: a ship or a camel or a pig is worth so many dollars, and a seat at the show or a ride in the bus costs so much: divide the former by the latter. This is simple enough—if you can think in dollars or pounds or marks or francs. But if there is no third commodity, no common measure of value, no yardstick to apply to all things, so that you simply don't know what a thing is worth," the exchange becomes all but impossible.

And we might conclude from this, not merely that our own civilization would be impossible without money or a means of exchange, which would be entirely correct, but that no social organization worthy of being called civilization would be possible without money. And that would be an entirely unwarranted conclusion which history does not support.

It is very important, not merely in order that we may understand money, but also in order that we may understand society and its mechanism, as well as its possibilities, to realize that a society without money need be neither poor nor primitive. There have been prosperous and orderly forms of society into which money practically

did not enter, into which indeed neither barter nor exchange entered. The feudal chieftainship, the medieval manor, the monastery, the pueblo, and other vaster and more complex elaborations to be described shortly, are outstanding types of a form of social organization which might be described as an enlargement of the household, operating by what some writers have called the "natural" economy as distinct from the money economy; societies often highly complex in their division of labor, in which neither money nor exchange nor barter entered any more than it need into the relationships between members of a family. There have been great and elaborate civilizations, before whose art and industry the world to-day stands in wonder, civilizations that lasted longer than any succeeding forms have done, that knew no such thing as coined money, managing to maintain an active and continuous industry without that system of constant—daily and hourly—exchanges by means of money, which has become a quite indispensable part of the life of that of the western world in which we live. The civilization of those who erected the Pyramids and sculptured the Sphinx, who built the Temples of Karnac, Babylon and Nineveh were such practically moneyless civilizations, moneyless that is in so far as the daily life of the mass of the people was concerned. Another extremely stable civilization in which, as we shall see, money entered extremely little and was deliberately, for long periods, practically abandoned, was that of ancient China. It is imaginable for reasons indicated that the later world may one day return to some such relatively moneyless form of society.

In grouping together certain types of society here described as "moneyless" a warning as to terms may be in place. We shall include in that category societies in which, within certain narrow limits (to be described) money of a kind may have entered. But those societies were moneyless in the sense that the activities which kept them going were not dependent upon hourly and daily use of a medium of exchange as in ours; they were societies in which their form of exchange, as described, had been abolished altogether

extremely little difference would have been made to the life of the mass of the people. In our world, if exchanges by the medium of money stop, life stops, people die. And it is a rather important distinction. The difference of degree (as we shall see) is so great as to make a difference of kind which it is important to bring out. In dealing with so fluid a thing as society we cannot get at the truth unless we avoid absolute and rigid categories.

In Messrs. Foster & Catchings' book on "Money" occurs this passage:

> Ours is a money economy, and it is almost exclusively through the use of money that productive relationships are maintained, as far as they are maintained at all, among men, machines, and materials. For better or for worse, we live in a pecuniary society. Money has come to be as necessary in the exchange of goods as language in the exchange of ideas. Our modern economic life is founded on money. Our whole industrial order is based on production of goods for sale at a money profit. The economic value of virtually everything, except consumers' goods already in the hands of consumers, is based on the expectation that it can be sold for money, or will have a part in producing something that can be sold for money. In our warehouses, factories, shops, and stockyards are vast stores of wealth—apples and amethysts, beets and barrels, carriages and cattle, and so on to the end of a list that, in its detail of grades, sizes and styles, would outrun the pages of the biggest dictionary; and in all these multifarious things the owners have one common, dominant interest, namely, to exchange them as soon as possible for the largest possible amount of money. Services as well as commodities compete in price markets; human success is measured mainly by salaries and wages; individual initiative is rewarded mainly in terms of money. More and more intensely, more and more generally, and over a wider and wider area, men and women are concerned with the problem of exchanging their products or their services for as much money as possible, or with the equally engrossing and insistent problem of obtaining as much satisfaction as possible for the money they have to spend. In short, human interests, ambitions, and activities tend to gravitate around money.[1]

This, as the authors remark, was not the economic order of the remote past, "and it may not be the economic order of the distant future. It may or may not be the best conceivable basis upon which

to produce, exchange, and consume goods." But since it is, as they truly say, in fact the order in which we live, no one can solve our economic riddles who does not understand the economic meaning of money. "It seems equally certain that misunderstanding of the function of money—what it can do for us and what it cannot do, what can be and what cannot be charged to its account—will lead to futile projects for social reform, political blunders, misdirected condemnation, discouragement, ill-will—in short, worse than wasted human efforts."

And it will help us to understand money to realize how men did without it; at what cost; the kind of society that they had to form in order to do without it; what led them to adopt it, and what happened when they did.

If we are to understand what money does—and what its absence would do—we must realize that the picture (which some historians would draw for us) representing man as steadily advancing from the semi-animal and so barterless horde to tribes in which barter became common, and thence to a money economy, and thence to a credit economy, is an outline so over-simplified as to make an utterly false picture. There is no such symmetrical chronological table. Money dates back to pre-history; the elements of credit—almost every form of it—to the very earliest history. Yet having discovered and adopted money, or slipped into its use, man sometimes dropped it; lived a better life without it, returned to it, and bettered the betterment.

We find nowhere a continued development by regular stages from barter to money with complete abandonment of the former and then complete adoption of the latter. (Indeed one may doubt whether pure barter ever in fact existed.) A century or more before Christ, in the forests of Britain, the woad-painted savages were using not only money but stamped coins, which they had got from the East. (See the following chapter for illustrations of early coins). And on that same soil more than a thousand years later, a rich and in some respects highly civilized life was le

by the men of the manor and monasteries, who from generation to generation did not in fact use money; who could go their whole lives through without seeing, still less handling any, who retained the "natural economy" as distinct from the "money economy." And five hundred years after that time, in the life for instance of the boy Abraham Lincoln, money entered so little that many a stout pioneer of his boyhood time would go from year's end to year's end and never see coined money. Some of our grandfathers, men who made the American Republic, belonged to a practically moneyless society—moneyless at least to this extent, that they could go their lives through and never use a coin; as Russian peasants may to this day.[2]

Indeed a year or two ago in Central Europe when the device of money had utterly broken down, in the midst of the most orderly civilization in the world, and men hurried to get rid of money for goods, since it had lost all stable value, it looked as though we were destined once more to return to the moneyless form, as the peasants of Russia, under a similar collapse, had already returned. While in the cities, helpless without money, people starved and froze, and the children died for lack of a cup of milk, the peasants on the farms and in the forests recked little of the lack of money. They waxed fat and fed their surplus milk to pigs, and the world talked of "the Green Revolution" in which the man of the soil was to come into his own once more, as against the man of the town.

What is more astonishing still in this strange story of money is that dead and gone civilizations managed to evolve to credit of a fairly elaborate kind (transferable credit based on commodities) without passing by coined money; that more than one ancient civilization seems to have achieved a "managed" or legal tender currency whose value did not depend upon the commodity value of gold or other metal; that over two thousand years ago men had come nearer to a true view of the nature of money than the masses in Europe and America have come to-day.

One of the itching questions of history is this: If two thousand

years before Rome men had elaborated credit, and if Greece and Rome alike had learned at least for a time to separate money from metal, why was Rome so dependent on gold that the failure of the supply of that metal has by more than one historian been assigned as the main cause of Rome's fall?

It is the commonplace explanation of most economic textbooks that the division of labor immediately sets up the need for a medium of exchange, which shall also be a measure of value. If a man can in Robinson Crusoe fashion be entirely self-sufficient, producing all he needs, there is no reason for exchange. But compasses, say, are needed. A man must give his whole time to the job of making them. He wants to exchange a part of his produce for a lesson in French, a seat at the theater, a new set of false teeth or a consultation with his doctor. Even if the theater wanted compasses how would it measure the value of a seat as compared with the value of a compass? It would seem that here is an insoluable problem unless we can call in the third commodity, the medium of exchange and the yardstick. How did the moneyless societies, that certainly made compasses or things just as complicated, get over this difficulty—the difficulty not merely of a medium of exchange, but a measure of value, to say nothing of the problem of property? It was the problem of measurement and property—who owned what—which as we shall see, was far more puzzling to men than finding a medium of exchange which they used in hit-or-miss fashion long before they had any clear conception of price and value, and precise notions of individual as distinct from common or tribal property.

In the case of the moneyless societies referred to above, the feudal estate, the manor, the monastery, the remote frontier farm and even, as we shall see, the domain of the Pharaohs, we are dealing with some form of the "household" type of social organization (though sometimes it may have resembled more a prison than a household), where money is no more indispensable than it is between members of the same family. Money was not indis-

pensable, because the essence of the social arrangement did not depend upon an exchange, but upon every one doing an assigned task and the product being divided by well-established custom or according to traditional hierarchial rights. And where a group is economically self-sufficient there is no need to exchange even with similar groups elsewhere.

If the maker of compasses in the economist's illustration given above is a member, say, of a large family engaged in fishing, he will secure payment in the shape of his share of the common food and shelter, without either medium of exchange, or measure of value, or settling problems of property. In the primitive family groups the wife or wives may cook the meat and dress the skins of the animals which the males kill; they share the food and clothing, but according to shares which are traditional or imposed by patriarchal authority, not by any process of exchange or barter in the economist's sense of the term. The husband does not "buy" cooked food with uncooked. That does not indicate the nature or relationship. And in the expanded form of household represented by certain ancient forms of society or the medieval monastery the division of labor was carried to a very elaborate extent; an extent which gave us sometimes a great architecture, music, art, learning, but all without a "system of exchange" and without consequently the need of any method or medium of exchange, because the job was done and the division of the product made much as jobs are done and divisions made in a family.

Each had his task and the product of the common labor was available to all by a rule, or custom, or law. This was certainly so in the case of the medieval monastery as authorities on medieval life like Professor W. Cunningham make plain. He tells us that it was essential for the prosperity of these establishments that they should be, so far as possible, self-sufficing, and that the monks should be able to provide necessary clothing and to repair the implements of husbandry without relying on outside help. "The abbot was therefore bound to organize the available labor so as

to obtain the best results for the community; he might set an artisan to work at his own trade; but the conception of personal reward was rigidly excluded, and the skilled laborer was discouraged from taking a pride in his work. All was to be done as part of the service of God, and for the advantage of the community." [3]

A most striking picture of this side of monastic life is to be found in the description of the monastery at Solignac, which was founded in A.D. 631 by St. Eligius, a celebrated goldsmith, who has left an account of his foundation. It contained at one time as many as five hundred brethren; it was so well organized that the Archbishop of Rouen held it up as a model for all other establishments. Among the residents were great numbers of artisans who were skilled in different trades, and trained as Christians to render prompt obedience.

It is not necessary to subscribe to any very roseate view of monastic life to accept the evidence that work went on from motives other than those we have come to regard as indispensable to labor in our monied society. The religious, or semi-religious motive behind the work of the monastery is important from the economist's and sociologist's point of view, in that it helps to explain the complex of motives which must have been necessary to keep going during two or three thousand years a far more elaborate and ambitious type of "household" society with which we shall deal presently. It seems clear, despite the satires and attacks of the Reformation period, that by the "religious," manual labor was accepted as a discipline which helped them to walk in the way of eternal salvation. It was not undertaken for the sake of reward, since the proceeds were to go to the use of the community or the service of the poor. It was not viewed as drudgery that had to be gone through from dread of punishment. "There was neither greed of gain, nor the reluctant service of the slave, but simply a sense of a duty to be done diligently unto the Lord."

But the point that interests us is that for centuries during the

Middle Ages all orderly life was organized on this household basis. It extended not only to the castles of kings and barons, and the palaces of bishops, but notably to the manor. "The normal economic unit, alike on royal lands, in monastic institutions, and in the possessions of lay proprietors, was the household. This may be a very large social group, but the mutual offices of the members are rendered as a matter of obligation, not as the result of agreements between men who are personally independent and drive their own bargains. It was already the military unit responsible for the defense of the realm, and was the territorial basis for the administration of justice and provision for the poor." [4] Charlemagne attempted in an organized way to make the household the economic unit of civilization. "The system which he formulated was adopted by the Normans, and was introduced into a country well prepared for receiving it, when William conquered England. The great household, as the center of rural life, has been an extraordinary influence on English development; it has shaped the ambitions of the English plutocracy from the days of William-de-la-pole, and has led them to set their faces from the towns where they had made their money to the country, where they exercised great power; it survived to stimulate the energies of the great landowners of the last century, when money economy had become completely prevalent, and induced them to give their attention to the improvement of English tillage. In the ancient world, and in much of the modern world, the city has had exclusive attractions as the center of social life; but English civilization has proceeded on the basis that is implied in Charles' maxims of social regulation." [5]

In Del Mar's view money had broken down with the breakdown of the Roman Empire in the West. "By the fourth century of our era money had fallen to the degraded position of *ponderata,* when it was customary to assay and weigh each piece. Before the seventh century the weights themselves had been so frequently degraded that it was no longer possible to make a specific bargain for money." [6] Payment in kind ruled everywhere. "The tenants of

knights' fees answered to their lords by military services; and the tenants of socage lands and desmesnes (in great measure) by work and provisions. . . . The rents of fermes due to the king were wont to be rendered in provisions and necessaries for his household. . . . The revenue of the crown was answered or paid . . . sometimes in palfries, destriers, chascurs, leveries, hawks and falcons, and in things of other kinds." [7]

Henry, in his "History of Britain," thus alluded to what in the Dark Ages was called living money: "This consisted of slaves and cattle of all kinds, which had a value set upon them by law, at which they passed current in the payment of debts and the purchase of commodities of all kinds, and supplied the deficiency of money properly so called. . . . Thus, for example, when a person owed another a certain sum of money, which he had not a sufficient quantity of coin to pay, he supplied that deficiency, by giving a certain number of slaves, horses, cows or sheep, at the rate set upon them by law, when they passed for money to make up the sum. All kinds of mulcts imposed by the State, or penances by the Church, might have been paid either in dead or living money, as was most convenient, with this single exception, that the Church, designing to discourage slavery, refused to accept slaves as money in the payment of penances. . . . In those parts of Britain where coins were very scarce, almost all debts were paid, and purchases made, with living money. This was so much the case both in Scotland and Wales that it is much doubted if any coins were struck in those countries in the Saxon period." The price of a man was the same as that of a hawk or a grayhound.[8]

It seems to have been part of the statesmanship of Charlemagne to foster the civilization of his time on a household basis so as to avoid development of a society dependent in any vital sense upon money. As the head of the revived Roman Empire he attempted, as we know, to revive the largely self-sufficient Roman villa. The "capitulare de villis" was not propounded as a mere fiscal measure

with the view of increasing the royal revenue; it aimed at increasing the efficiency of the economic organization of society as a whole. Of the effort Cunningham says:

> This capitulare . . . shows us an almost unique effort to organize a highly civilized life on a basis of natural economy. Military obligations, justice, and poor relief are inseparably linked with the household, within which there is no money circulation. Money and commerce were not excluded; but the prosperity and strength of the realm were dependent primarily on the management of natural resources, and not on the accumulation of treasure. The amassing of bullion had been the Merovingian expedient for equipping armies, and it gave the means for bribing barbarians to abstain from plundering.*

It is true that ultimately commercial activities setting up the need for money arose out of the desire to dispose of an industrial surplus; there arose the need of transmitting funds to a central government or to Rome, while the Crusades greatly accelerated the drift from "natural" to the "money" economy. But for very long periods, for perhaps six or seven hundred years monastery and manor and feudal estate remained practically moneyless because self-sufficient.

The thirteenth century was a period of great material prosperity, and one of rapid transition, one might almost say of economic revolution, which saw the definite abandonment of natural economy.

* "Western Civilization in its Economic Aspects." Vol. 2, p. 53.

Cunningham adds an interesting note on the later effects of the "household" ideal:

> In the expansion of English influence beyond the seas, this household type has sometimes been retained, but sometimes we have the land settled in small homesteads. The resultant civilization in each case has varied immensely. In the tropical climates of India and Ceylon, of the West Indies and the Southern States, with the exception of some parts of Georgia and West Virginia, there are planters with laborers in practical dependence, even where slavery is extinct and cash relations exist; and in the pasture farms of Austria there are rich squatters. In these lands we get a diffusion of wealth and culture beyond the limit of cities. In the Northern States, in Canada and South Africa, the rural districts were occupied by little homesteads. There are great drawbacks in this latter system, since it concentrates all social advantages in urban groups and leaves the rural population to a sordid struggle for independence, or monotonous drudgery under giant capitalists. Vol. 2, p. 54.

The revival of commercial intercourse and development of trading centers had brought about a wide diffusion of money, which tended to the substitution of money bargains for payments rendered in service and in kind. "The government, ecclesiastical as well as civil, was keenly alive to the financial convenience of a money revenue, in respect of collection, transmission, and methods of account. The system of natural economy, as embodied in Frankish institutions, was passing away; and the pressure of the demands of fiscal officials forced proprietors generally to reorganize their establishments with a view to obtaining a money income from their estates. The course of the transition from natural to money economy —from barter and payment in service to the use of coin—gave rise to many practical problems, and called forth a great deal of learned discussion." * That discussion will interest us a little later.

It is interesting to note that the "unmonied" age in China lasted much longer than in Europe, just because probably the "household" system and type of motive fitted in with a civilization which has made the family rather than the state the effective social unit. It is noted by Burns in his "Money & Monetary Policy in Early Times" that the Chinese "never made money the axis about which their economic life revolved." On at least two occasions they abandoned the use of coins altogether for short periods, and endeavored to return to early mediums of exchange.[9] In the China of the past "we find ourselves in a very different environment from that of the Mediterranean. Coins emerged out of implements and utensils in early times, but issues were left to merchants and guilds. The

* "Western Civilization in its Economic Aspects," by W. Cunningham, London, 1924, Vol. 2, p. 67:

The contributions of the ecclesiastical institutions to Rome helped to force a money economy. These dues were partly connected with the administration of canon law, and partly consisted of Papal taxation of various kinds. The collection of this revenue gave rise to an enormous fiscal system; the agents who administered it were Italian bankers and their partners, and these Papal merchants were settled all over Western Christendom.

ruling powers intervened to suppress issues in part of China in the later fourth century B.C., but only in the last two decades of the third century B.C., was a state coinage issued by the central government," and then was more than once abandoned. The precious metals were never coined in China in ancient times.

H. G. Wells in his "Outline of History" notes that China never went through the "financial" period which marked the Imperial era in Rome and still more—much more—our own era in the West. "China had no general coinage. The cash and credit system of the Western world, at once efficient and dangerous, had not strained her economic life. . . . This great empire was still carrying on most of its business on a basis of barter like that which prevailed in Babylon in the days of the Aramean merchants. And so it continued to do to the dawn of the twentieth century." [10]

Nearly all students of the older Chinese civilization agree that the Chinese attitude to the precious metals is entirely different from that of western peoples. So far as possible, the working of mines was altogether prohibited in normal times. Sometimes private individuals were able to obtain permission to carry on mining operations, but only on payment of very heavy taxes. Lacouperis in his work on Chinese coinage says: "The Government, in fear of enriching the wrong people, at the expense of morality and simplicity of life, kept the mines as state property, to be resorted to only in cases of extreme need. The rudeness of mining processes, and the dearth of metal which ensued, caused the metallic currency to suffer." A. R. Burns points out that such a policy must have tended to increase the value of the metal in China above its value elsewhere where free exploitation of deposits was permitted, importation from abroad being unimportant. "But the fact that the philosophers and politicians of the time discouraged any attempt on the part of the state to work the deposits on a large scale meant that the state, never being the vendor of large quantities of metal, was not driven, in early times, to adopt coining as a method of facilitating the marketing of the metals. The introduction of coining depended

solely, therefore, on the advantage of trade. The stability of economic life in China, and the organization of trade and exchange on a basis of long-standing custom, probably made even these advantages less significant than in the expanding communities of the Eastern Mediterranean." [11]

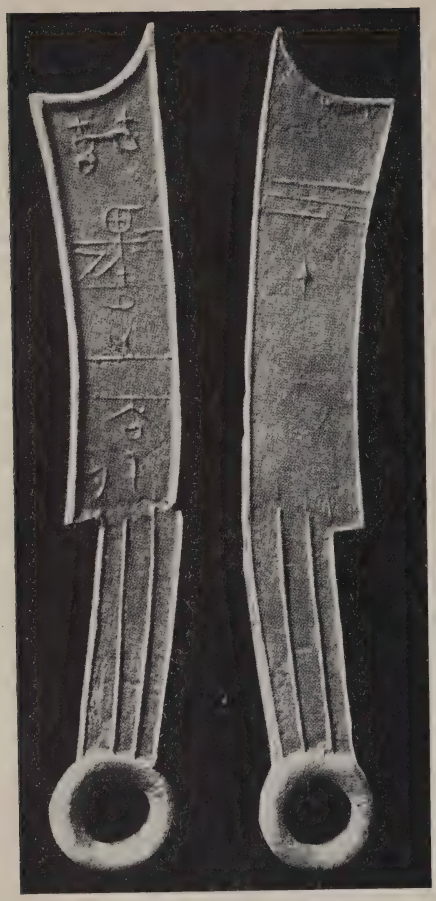
This relative absence of money and credit in China is, in view of the stability of Chinese society, particularly interesting in relation to the case of the ancient Egyptian civilizations, which will be considered in a moment. China achieved stability, at some cost certainly, as Egypt achieved it at still greater cost, in freedom; and in the stability of both the absence of a developed money system undoubtedly played a large part. Because there was no such development of "finance" as occurred in Rome, wealth in China remained real and visible. China had no need for any Licinian Law, nor for a Tiberius Gracchus.[12] She was not subject to strains that the Roman society knew. There were no dark ages in the European sense. "The social collapse was never so complete in the Chinese as in the European world. There remained throughout the whole period considerable areas in which the elaboration of the arts of life could go on. There was no such complete deterioration in cleanliness, decoration, artistic, and literary production as we have to record in the West, and no such abandonment of any search for grace and pleasure. We note, for instance, that tea appeared in the world, and its use spread throughout China. China began to drink tea in the sixth century A.D. And there were Chinese poets to write delightfully about the effects of the first cup and the second cup and the third cup and so on. China continued to produce beautiful paintings long after the fall of the Han rule." [13]

While in the foregoing outline sketch of moneyless or nearly moneyless societies, some description of the monastery was given none was given of the most notable, and on the whole the most successful type of household systems known to history, namely, th

Denarius bearing (A) Head of Augustus and (B) Gaius and Lucius Cæsar.

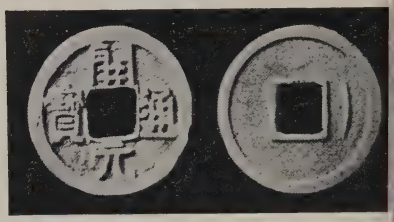
Copper as bearing (A) Head of Augustus and (B) inscription with *SC* in the center.

Brass Sestertius (four as piece).



Chinese knife money; length 7 in.; weight, 740 grs.

Later Chinese knife money, 7-22 A.D. showing the development from the knife money to the Cash.



Chinese Cash, 680 A.D., weight 59 gr

THESE PICTURES SHOW HOW THE ROUND CHINESE MONEY, WITH WHICH WE ARE FAMILIAR TODAY, HAS EVOLVED FROM THE EARLIER "KNIFE" FORM. THE BLADE OF THE KNIFE HAS DISAPPEARED INTO THE END OF THE HANDLE.

English manor. That has been left to this point because it is useful to place the characteristics which explain it in juxtaposition with those of a vast and sublimated form of the household economy—the system of ancient Egypt.

The economic independence and self-sufficiency of the English manor, the French seigneurie, the German Gutsherrschaft, all descendants in some measure of the Roman fundi, is a theme upon which a vast literature has been written. The manor was indeed a type of economic organization in many respects ideal. That during long ages it must have been one in which the "natural" economy was dominant and indeed into which often money did not enter at all, we have given evidence enough to show. Sometimes it must have represented the best form of "household" economy that man has developed. In securing from each inhabitant of the little world the necessary services, the division of labor and the division of the product without calling upon money, either as a medium of exchange, or a measure of value, or as a motive for labor, the manor could not count, as the monastery was able to usually, upon a strong religious motive.

This meant that the activities of each and the rights of each must have been secured by an elaboration of law and custom which it is difficult for us of our age even to understand. But if we can get some glimmering of how the "household" economy can develop into a system of hierarchy, law and custom, and can for centuries dispense with money, we shall be able to understand how that general method, on a much vaster scale, could, in the case of ancient Egypt (which we shall consider presently), support a civilization which lasted longer than any other civilization has done. And it will help us to understand also the price that was paid for that stability and moneylessness.

The common use of money has achieved such liberations for the ordinary man, made him so much more of an individual, that we have difficulty in realizing how completely the individual can in certain types of society be merged into the community and con-

form to its rule as completely as bees conform to the rule of the hive.

The nature of this conformity has been misunderstood because it has so often been represented as "the oppression of the tyrant." But a Pharaoh or Pope or Abbot has no power except as the community acquiesces in it. The picture that we commonly draw of these old societies, or a single tyrant or a tiny clique holding in subjection, by means of physical power, a vast mass of humanity, is of course ridiculous. One man cannot impose his power by virtue of his physical strength upon millions if those millions have a mind to resist. The preponderance of physical force is not with the autocrats or the oligarchy, but with the mass. What gives the hierarchy its real force is that men are governed mainly by habit, custom and routine, which they soon come to identify with morality. The thing to which we are accustomed is the thing which we regard usually as right; and it is extremely difficult to induce us to question its rightness, still less refuse to go on doing it. And in early societies, where men gave supernatural sanction to what we regard as very secular activities, a custom could quickly harden into a "law" so rigid that the boldest heretic dare not question it; and a man toiled slavishly, took a tiny part of the product, died in the senseless quarrels of chief or tribe, without for a moment questioning the need or equity of his sacrifice; and by such unquestioning activities riveted upon himself the very chains of the system which held him prisoner. When he stumbled upon such devices as writing, printing, money, inductive reasoning, he began to acquire habits of freedom which made great inroads into the habits of acquiescence and conformity. Written law had to become more elaborate and have behind it great power just because social conformity lost its power.

This much seems clear: the force of social custom, without much real power of centralized government, could produce, in China, in the independent groups of the Middle Ages, and in ancient Egypt (though in the latter case the centralization of power took a more visible and formal shape), an elaborate society that was mainly

moneyless just because the momentum of social custom by fixing both duties and rewards, made money unnecessary. That strength of custom made a slave of the individual the more easily because he had not learned the use of money.

As throwing light on these generalizations we may glance for a moment at the "household" of the manor.

The manor arose out of the ruins of Roman institutions * in a society that had gone all but utterly to pieces (the part that money had played in that ruin will be considered in the next chapter), and it is extremely interesting to trace the way in which units of order on a household basis grew in the midst of a social welter by the interaction of custom, localized hierarchial authority and religion.

If we read the transcripts of Anglo-Saxon Laws which authorities like Professor Vinogradoff have made for us we cannot fail to be struck by the fact that the "custom of the folk" alone made possible the power of the lord. Those customs or laws came finally to be of an amazing complexity; it was under their complexity, indeed, and sometimes their contradictoriness, that the power of the lord broke down.

At the head of the society came the lord of the manor, with his hall, court, or manor house, the land immediately about it, and his demesne both in the fields and in the meadow lands. Below the lord and the free tenants came the villeins, natives, bondmen, or holders of "virgates" or yard-lands, each holding a house, a fixed number of acre strips, a share of the meadow and of the profits of the waste.

The services to be rendered by the villein were usually regulated to the minutest detail: the days that he had to come with his own plow and oxen to plow the lord's demesne; when, plowing being done, he had to harrow, to reap the crops, to thresh and carry them; the payment in kind that had to be made, the amount of honey, the number of eggs and chickens. There were many ranks

* This does not mean that the Empire had disappeared; only that it had evacuated large areas of the West.

besides the villeins. There were, for instance, cotters, "the poor of the manor," who held a cottage and garden, or perhaps one acre or half an acre in the fields. They were less unfree than the villeins, and from their ranks were usually drawn the shepherd of the manor, the bee-keeper and other minor officials.

A complicated organization necessarily involved administrators. Highest in rank came the steward; he was attached to no manor in particular, but controlled a group, traveling from one to the other to take accounts, to hold the courts, and generally represent the lord. Under him were the officers of the several manors. First came the bailiff or beadle, the representative of the lord in the manor; his duty was to collect the rents and services, to gather in the lord's crops and to account for the receipts and expenditures of the manor. Closely connected with him was the "messor" or reaper; in many cases, indeed, "reaper" seems to have been only another name for the bailiff. But the villeins were not without their officer, the provost or reeve. His duty was to arrange the distribution of the services due from the tenants, and, as their representative, to assist the bailiff in the management of the manor. To these important officials may be added a number of smaller ones, the shepherd, the swineherd, the bee-keeper, the cowherd, the plowman and so on, mostly selected from the cotters, and occupying their small holdings by the services expressed in their titles.

In all these cases then of a "household" type of organization, whether in the latter feudal estate, the manor, the monastery, or other religious community, to say nothing of the Chinese groups, we get an elaborate division of labor and exchange of the product without the money economy. To that extent clearly we must qualify the usual generalization of the economic textbooks to the effect that any considerable division of labor must involve an exchange system and its medium.

The same type of moneyless civilization of considerable elaborateness may be found on the other side of the world in the Inca civilization of pre-Columbus America.

Practically all descriptions of Inca civilization note the absence of money. Thus, Mr. Reginald Enoch in his "History of Peru" (p. 21) notes: "There was no currency, and gold and silver were only esteemed for purposes of decoration of temples, etc.; and no one worked to obtain these—to them—comparatively useless metals, except in their spare time, and for the above object."

He goes on:

> The tribute of taxes paid to the Government—the Inca—was rendered in the cultivation of the lands, and the gathering-in of the crops. Great granaries were constructed, and grain stored therein, according to the requirements of each village. Or otherwise, tribute was payable in woven cloth, arms, shoes, and other articles, for the Incas considered it unjust to expect payment in articles which could not be purchased in any given locality. The crops and supplies belonging to the Sun and the Inca were kept in separate storehouses, and formed provision for the army and other State requirements, and for distribution among the people in time of scarcity or need.

All these cases tell the same story: Where men are guided unquestioningly by authority, by custom or habit, particularly where those factors are buttressed by religious tradition, it is possible to secure both a very elaborate and a very stable civilization, sometimes with marvelous art and handicraft, without resorting to trade, exchange, or money in the modern sense at all. Those things are no more needed in that type of civilization than they are needed in the extremely elaborate social organization of the beehive—which some ancient civilizations in their utter lack of freedom and individuality astonishingly resembled. The only limits, indeed, to the development of this "household" social organization, which dispense with exchange or its media, is the efficiency of the social control which keeps everybody to his job. In the case of the beehive or the ant hill, these processes attain a complexity and delicacy which no human society has ever been able to duplicate. It would be altogether too dogmatic to say that no human society ever could, but we may hope, those of us who value freedom, that no human society ever will. That reflection emerges when we come to

examine the supreme case of this hierarchial, authoritarian, beehive, moneyless type: the case of ancient Egypt.

It is true that trade and a medium of exchange, and even banking of a kind, were known in Egypt and Babylon. But they were activities that belonged to a special and very small class, and largely to the relations between kings and states. Money was no part of the life of the people. Sale and purchase was an elaborate affair, seldom attempted by the ordinary man, in which, if a medium of exchange was used, it took the form of a given weight of metal. "Metals were handed about in ingots, and weighed at each transaction. . . . Common people, who in those ancient times were in dependent positions, seem to have had no money at all; they did their business by barter. Early Egyptian paintings show this going on. . . . The trade that was going on in the ancient world before the sixth or seventh century B.C. was almost entirely a barter trade. There was little or no credit or coined money."[14] These dates should be noted. The first recorded coins were minted about 600 B.C. in Lydia, while the great period of Egyptian civilization had been reached at least a thousand years before that date.

Lord Avebury in his work on "Coins and Currency" (p. 10) says: "Money seems to us now so obvious a convenience, and so much, I might almost say, a necessity of commerce, that it appears almost inconceivable that those who erected the Pyramids and sculptured the Sphinx, should have been ignorant of coins. Yet it appears certain that this was the case."[15]

Lord Avebury warns us as to the interpretation of certain biblical passages that might mislead us in this matter. Thus in the seventeenth chapter of Genesis, in our version, we find among the commands given to Abraham, "He that is eight days old shall be circumcised . . . he that is born in the house, and bought with money of any stranger." The word here translated "money" is in the original *keseph;* in the Septuagint it is correctly rendered by *apyúpiov,* and in the Vulgate *argentum;* in fact, it should have been translated "silver," not "money."

Again, in Genesis xx, 16, we are told, "And unto Sarah he said, Behold I have given thy brother a thousand pieces of silver." The same expression is repeated in chap. xxxvii, 28. Here the word "pieces" suggests money, but probably it only meant pieces of a certain weight. The same observation applies to the statement in chap. xxiii, where Abraham bought the cave of Machpelah as a burial place for Sarah, and he "weighed to Ephron the silver, four hundred shekels of silver, current *money* with the merchants." Here it will be observed that the word money is in italics, implying that it is not in the original. It is obvious that silver was used by weight, the word "shekel" meaning originally a weight, like our pound, and afterwards, like the pound, being used for a coin.

Similar warnings are issued by Cunningham in his work on Western Civilization. Speaking of a time when Egypt's civilization was already old, and of a people much more advanced in commerce than the Egyptians,[16] he deems it improbable that the peasantry were habituated to the use of money in ordinary life during Solomon's reign. "It appears probable that the taxation of the country was levied in commodities and service. Solomon had twelve officers who provided victuals for the King and his household, each man having to make provision for a month in the year. They may have been purveyors who purchased the necessary supplies, but it seems more likely that the supply of food was levied as a tax payable in kind. Food was undoubtedly required; and a levy of this sort might be the easiest way of securing it, but so long as the expensive and inconvenient method of collecting revenue in kind continues to be in vogue in any land, it is improbable that money will have come into common use for other purposes." [17]

The truth would seem to be that though the apparatus of commerce and banking was known, money transactions were rare and pertained only to a special class; although commerce had its laws, as diplomacy in our day has its laws, exchange during the long history of Egypt entered as little into the daily life of the common people as diplomacy does into the life of our common people.

"The Policy of the Egyptians," says Burns,[18] "was to avoid the use of coins as long as possible," and rely upon a commerce based upon payment in metals measured by weight. "The Persians did not succeed in establishing any enduring or popular currency. The first coinage was established under the Ptolemies at the end of the fourth century, but subsequent policy is difficult to trace because of the difficulty in assigning dates and denominations to the coins."

Sir Flinders Petrie in his "Social Life in Ancient Egypt," [19] remarks that "There was no rich merchant class, for trade within the country was slight, and abroad it was probably in foreign hands." The artificer class had reached an independent market but slowly, and late in national development, and had none of the political hold that the scribe and the official enjoyed. "Free tradesmen had existed from very early times, but only in small numbers, and they were, therefore, insufficient to assert any influence."

Even in Babylonia which had developed (in such codes as that of Hammurabi), laws of usury "Coin itself was scarce, and both principal and interest were often paid in kind." And again, "Money does not appear to be in universal use, a state of conditions which reminds us of the society in the Book of the Covenant." [20]

Although authorities differ as to the extent to which the money economy had in ancient Egypt become a part of normal life there is substantial agreement that coinage did not come in until the Ptolomies and was then foreign in its origin. Until coinage, money can hardly have meant to the mass of the people anything in the nature of what it means to us to-day: a part of the machinery by which daily life goes on.

The vital activities were ensured by other means: in principle and essence the means which ensured the life of the manor. We saw that in that case the factors which made possible an elaborate division of labor without exchange were: economic self-sufficiency within the social unit; powerful authority imposed either by a closely knit hierarchy, tribal custom, religious sanction, or a combination of all three. We saw in feudalism, as expressed in the manor, a

divided authority: the religious and the secular ruler were not the same; and the units were small and in course of time ceased to be economically self-sufficient.

The Egyptian state escaped this source of weakness by uniting secular and religious authority and was placed in physical circumstances—dependence upon an irrigation system which could only work as the result of a closely knit social organization—which gave it the choice of efficiency under disciplined leadership, or extinction. Social discipline developed because it had such supreme "survival value."

The evidence which bears on these points is unmistakable. "It is clear," says Cunningham, "that Egypt was, to an unusual extent, a 'self-sufficing' country. The monuments prove to us that industrial arts of every sort were highly developed under the Old Empire, but there was no need to depend on other peoples for the requisite materials. With flax and cotton fibers, with abundant food, and ample materials for building, Egypt was not compelled to go beyond her own borders for any of the ordinary requirements of life. The mountains and the deserts served on the whole to protect her from the incursions of enemies, and gave security for the prosecution of the arts of peace. . . . A country thus self-sufficient had no need to engage in trade; it seems that during the greater part of the Old Empire the Egyptians had no foreign commerce at all, and that even in later days they failed to develop much aptitude for it." [21]

What developed were not individualist, personal activities like trade and money making, but such a marvellously strong social organization that commerce was broadly speaking unnecessary. The degree of organization they attained shouts at us from the Pyramids.[22] Nor is it difficult to see how this discipline must have arisen. The life of Egypt depends upon managing the waters of the Nile: damming them up at certain seasons, letting them out at others. These works are on a scale which can only be accompanied by widespread coöperation. Unless at certain seasons the tens of thousands can work together on the dams which store the Nile water

the self same tens of thousands die during the next dry season. Orderly labor, the capacity to work not as individuals each following his own ends, but as a mass following the common end, the end of the hive, was the condition of living at all. Any large-scale organization, especially in primitive societies, can only be achieved by means of the authority of leaders, chiefs. That indeed is indispensable even when society has developed tools of intercommunication between individuals, which the ancient world did not know. Authority, discipline, order, rule, obedience were as necessary here as in an army fighting a ruthless enemy—as indeed those labor armies of Egypt were fighting the ruthless enemy of drought. And this was aided by a physical situation which placed the king or chief in an exceedingly strong strategical position. "Control of food supply was the basis of the Pharaohs' power, for it is fairly clear that it was through the hold obtained upon the people by the great irrigation works, that the Pharaohs were able to extort such toil and wealth from the cultivating peasantry. By controlling the river the Pharaohs had acquired political power, and they used the political power to carry out the huge buildings on which they had fixed their ambition." [23]

All forms of power—economic, political, religious—came to be concentrated. Professor Myers sketches the process of concentration: at first, "much of the land rights, and also the water-rights, which in an irrigated region are as inseparable from the land (provided only that there is water available), as the right to rainfall is with us, were from the first in the hands of powerful individuals, and were held by their families. The rest was held by the priesthoods as corporate trustees for their gods; and the proportion of sacred to lay property was always rising as centuries passed; since in successive dangers from drought or violence, lay landowners would surrender their land to the god to ensure his protection, remaining on it, they and their children, to cultivate it, for him forever, and receive their maintenance as his hereditary tenants." [24]

Such was the theory; in practice the policy of the First Dynasty

transferred to the king the lands of the chiefs he conquered in each district, and public works which only a king of all Egypt could put in hand created large new royal domains, which were his by right of conquest over nature.

The result of the combination of forces here involved is sketched by Sir W. M. Flinders Petrie:

> The king was more than the legal ruler. He was the lord of each of the successive states which had been unified into one Government; he acquired thus the various titles of the rulers of those states, and had five different kinds of names belonging to those different dignities. Further, he also acquired the religious positions which had been the due of the various kingships which he absorbed. He seems to have had the position, well known in many other countries, that the welfare of the land depended upon his vitality and actions; it is only from this point of view that we can understand the rigid regulation of a set time for everything that he did, his being a slave to his position. Another matter, which surprised the Greeks, was his entire subservience to the law; Diodoros says that they lived not like other kings, without control, but in everything conformed to the laws, not only in government but in private life.[25]

"Perhaps the hardest task of all," says Cunningham in dealing with Egypt, "is to find suitable phraseology in which to describe and discuss the reported phenomena. Before the era of money economy, the sides of life, which we distinguish as economic and as political, were merged together; in Egyptian history, foreign commerce cannot be readily distinguished from tribute paid by dependencies, and (to use modern terms) the 'organization of labor' was intimately connected with the 'incidence of taxation.' In Greek and Roman life, analysis is much simpler, and modern economic categories—such as capital—can be usefully applied, but not in Egypt." [26]

His conclusion points a moral with which we shall deal more fully when we come to the Roman period:

> "Many of us are inclined to argue that it would be well to substitute organization for our existing arrangements. In

ancient Egypt, so far as we can see, there was no competition, and no speculation or money-grubbing on the part of individuals. There was an industrial tyranny which oppressed the laborer, and ground the lives out of criminals in the mines; but this was merely part of the administrative system of the country; the political and social organization were not distinct."

That Egyptian world, moneyless so far as the common man was concerned, was highly organized, intensely disciplined. It produced great results and it was very stable; as unchanging, it must have seemed to those who lived in it, as the processions of the seasons. But the individual was lost—merged in the organization, at the mercy of a machine which ran by the motive force of custom which had become religion, a force to which the Pharaoh himself was subject and of which he himself was the slave.

When money came at a later date to the world, it helped, as we shall see, to give the individual freedom; but it also helped, in a way which we shall trace, to break up the social organization; it was one of the forces of the disintegration of the Roman Empire. That collapse did not free men (man can lose his freedom as completely in anarchy and chaos as in an over-organized society like that of ancient Egypt): it merely changed their masters, made them subject to a different type of tyrant. Organization in course of time returned to the world, and we are now getting, within certain geographical limits, closely knit social units with a very intricate organization, more intricate—and more vulnerable—than the social organizations of the past. The fact that the wheel seems to be turning full cycle prompts us to ask whether, with the return of the greater complexity in our social organization, we shall ever return to a moneyless or largely moneyless civilization.

It is a suggestive fact that recent developments in one sphere of the economic organization of society, should point to the possibility that, as organization in certain respects increases, the degree of dependence upon finance declines. In the development of what

sometimes called "the vertical trust" we get an economic unit which, within limits, becomes increasingly self-sufficient and correspondingly independent of financial organization. The process has been traced by Mr. Emile Burns in his essay on "Modern Finance." [27] He points out that "When a particular concern has expanded in its own sphere up to a certain point, it tends to use its reserves for buying up other concerns, usually in allied or subsidiary spheres of industry. A shipping company, after, perhaps, considerable extension in its own sphere of shipping, will use its rapidly accumulating reserves to buy up mines, engineering works, or possibly shipyards. Instead of paying separate laundry concerns for doing its washing, it will buy or set up for itself a special laundry to do its work. A railway company, instead of buying its engines and carriages from other concerns, will buy up or set up its own constructional shops." The effect of this on the financial machine is to eliminate the services of the banks in effecting the ordinary exchanges of trade, the record of the exchanges being kept in the books of the company instead of in the books of the bank. Instead of Furness, Withy & Co. paying the mining firm of Smith $10,000 for a consignment of coal, and the money being transferred by cheque from one account to the other, a transfer is made in the books of Furness, Withy & Co. from its ship accounts to its mining accounts. "Money, even the abstract check money used for large transactions such as this, is not used in the process; the financial machine is not required in a transaction in which 'the right to use' is transferred from a company to itself. The transaction may be compared to the transfer of a lettuce from Mr. Furness's garden to Mr. Furness's kitchen; if Mr. Furness is very keen on accounts, he may credit his garden with some fictitious 'value' for the lettuce—say the amount which it would have cost him to buy a similar lettuce—and he may debit his housekeeping account with that amount. But it is clearly an unnecessary process; and the transfer of coal referred to above is exactly the same nature as the transfer of the lettuce."

In these ways the author of this essay thinks that the rapid extension of concerns which is now taking place is tending, over gradually increasing spheres of trades, to eliminate the financial machinery which assisted trade to develop. "In the first place, the retention of reserves in large concerns tends to eliminate the machinery of investment, which depends on the attraction of unattached money; in the second place, the consequent extension of the trading activities of large concerns tends to eliminate the financial machinery of exchange. What would happen to the financial machine if the present tendency to amalgamation and extension were carried to its logical extreme? In a sense, speculation on this point is idle; such a situation could only arise through an impossible degree of amalgamation among industries, or through the complete absorption by the state of all individual 'rights to use.' But the realization of what would happen in such a case brings out vividly the real meaning of 'money' and the purpose of the whole financial machine."

The question was raised, a little further back, whether with this process continuing and society becoming once more less individualist in its activities as was Egyptian society, it will ever be able to return to the moneyless forms which we have been discussing. Mr. Emile Burns does not think that the present tendency towards "self-financing" in large measure, of certain great industrial organizations, can ever eliminate money; he does think it will transform the character of finance. Using the word "money" in the sense of "rights to use" capital, he says:

> If all "rights to use" were concentrated, either in one great combine or in the State, finance as we know it to-day would have no function. The machinery of investment, the attraction of money or rights to use capital (the material things needed for production), would have no place. The great combine or State, controlling the rights, would act in the same way as the great firm now does. Some of the production of one year would be distributed for consumption, just as the firm distributes dividends for current needs; the rest of the production would be set aside as "capital" for future production, just as the great firm now sets aside its "reserves." Similarly, the transfers of goods that take place for the satisfaction of our daily needs would

be recorded in various "accounts" of the great combine or State, just as the great firm now records transfers from one of its departments to another. The financial machinery involved in exchange at the present day would be completely eliminated in the same way as it is partially eliminated in the transactions of a great firm to-day.[28]

In his view the financial system, useful as a means of getting over the hindrances to production and use which are involved in the system of private ownership, is no more essential to industry and use of the products of industry than are the stock and share certificates issued by a company. And with the credit system "the whole machinery of interest, bills of exchange, mortgages, and loans would disappear." But it is not likely that money would disappear:

> The convenience of a universal right as compared with a particular right (such as is conferred by a bread ticket), especially in a highly complex civilization, would ensure the retention of money. The money might not be of gold or silver—paper might be found more convenient—but some sort of general medium of exchange would be found indispensable. The check system might be retained; but it is likely that the banks (or whatever similar institutions were then called) would become the institutions for recording the production and consumption of goods, instead of recording the production and consumption of money, the right to use goods.
>
> In such a community the amount of money issued would be dependent on the production of things; so that the value of the pound (or whatever was then the unit of money) would be stable, as the amount issued of units of the right to use would correspond with the number of units of production.

This last anticipation brings us to actual problems with which we shall deal when the story of money in the past has given us a background for grappling with the present.

There is one form of moneyless life upon which a word perhaps remains to be said. That is life in those Utopian communities whose members have attempted to skip a century or two—whether backwards or forwards will depend upon our views—and dispense with money by a new type of organization, or to use an entirely new kind of money. A few of such attempts have become famous.

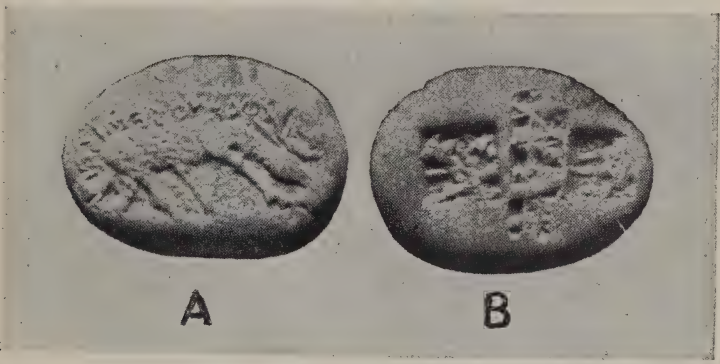
In 1832 Robert Owen started a scheme which caused much excitement. He had published since January, 1832, a penny paper called "The Crisis," and in that periodical he announced in June the formation of an association to promote the exchange of all commodities upon the "only equitable principle" of giving "equal values of labor." To carry out this, an "Equitable Labor Exchange" was opened on September 3, 1832, at a building in Gray's Inn Rd., London, called the Bazaar. Any goods might be deposited in it; "labor notes," which had been elaborately contrived to prevent forgery, were given in exchange, and the goods deposited might be bought in the same currency. The system was exceedingly crude, and indeed scarcely intelligible. There was, however, a rush to the exchange. A large amount of deposits was made, and the example was imitated, especially in Birmingham. The system only survived for a short time.

"The Owenite communities in America, which rose under the influence of Robert Owen's work at New Lanark, and his propaganda in America from 1834 onwards, were more permanent and important. The principal was New Harmony (acquired from the Rappists in 1825); Yellow Springs, near Cincinnati, 1824; Nashoba, Tennessee, 1825; Haverstraw, New York, 1826; its short-lived successors, Coxsackie, New York, and the Kendal Community, Cantor, Ohio, 1826. All these had more or less short existences, and were founded on Owen's theories of labor and economics.

"The Fourierist communities similarly were due to the Utopian teachings of the Frenchman, Charles Fourier, introduced into America by his disciple Albert Brisbane (1809-1890), author of *The Social Destiny of Man,* who was efficiently helped by Horace Greeley, George Ripley and others. The North American Phalanx in New Jersey, was started in 1843 and lasted till 1855. Brook Farm was started as a Fourierist Phalanx in 1844, after three years independent career, and became the center of Fourierist propaganda, lasting till 1847.

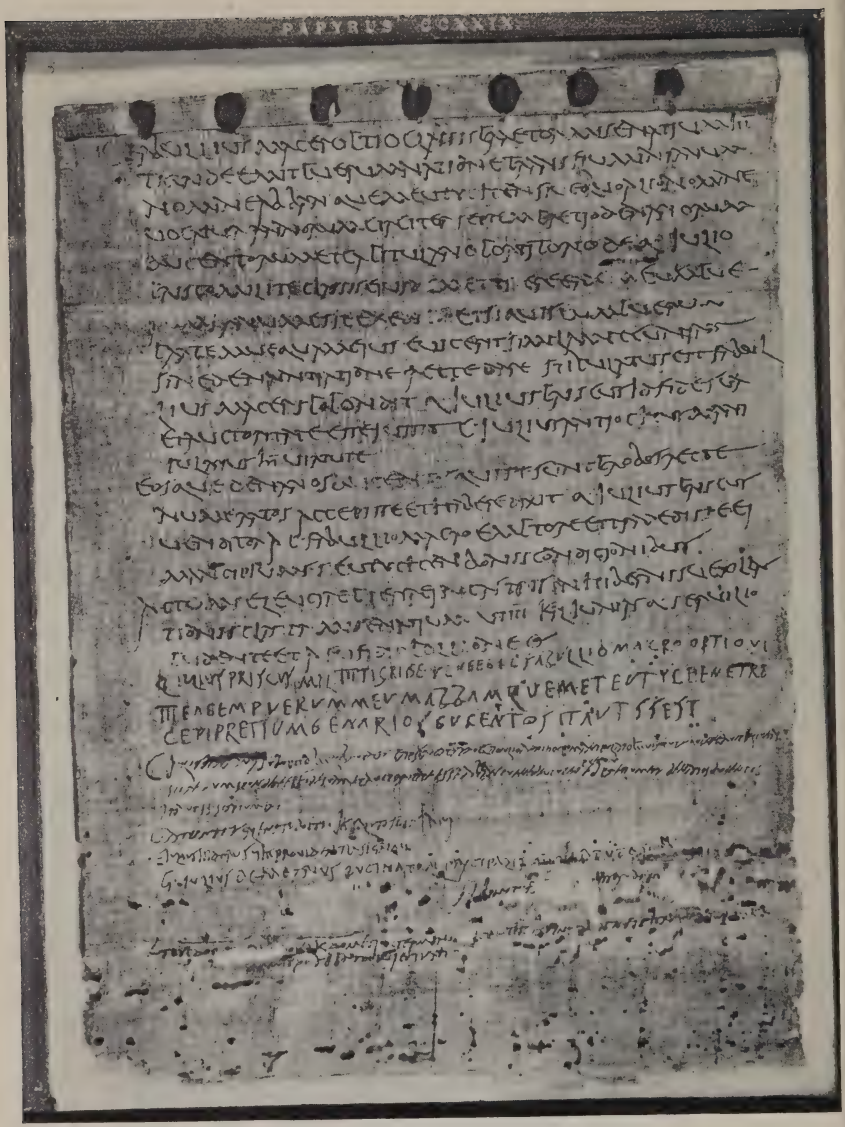
"The Icarian communities were due to the communistic teachin

Lydian electrum coin of the time of Gyges (687-652 B.C.). This is the earliest known coin.



The oldest inscribed coin—a piece of electrum picked up at Halicarnassus bearing (A) a grazing stag with the words *I am the badge of Phanes* and (B) three incuse stamps.

Early Chinese Pu money, in the shape of a shirt, B.C. 700.



Deed of sale of a slave boy, aged seven, named Eutyches at Seleucia Pieria, A.D. 166. Bought by C. Fabullius Macer from Q. Julius Priscus.

of another Frenchman, Etienne Cabet (1788-1856), the name being derived from his social romance, *Voyage en Icarie,* sketching the advantages of an imaginary country called Icaria, with a coöperative system, and criticizing the existing social organization. It was his idea, in fact, of a Utopia. Robert Owen advised him to establish his followers, already numerous, in Texas, and thither about 1,500 went in 1848. But disappointment resulted, and their numbers dwindled to less than 500 in 1849; some 280 went to Nauvoo, Illinois; after a schism in 1856 some formed a new colony (1858) at Cheltenham, near St. Louis; others went to Iowa, others to California. The last branch was dissolved in 1895." [29]

CHAPTER III

GROPING TOWARDS THE MONEY DEVICE

Since money is a medium for the exchange of property it implies some otion of "property," measurement and value and some conception of ne way in which both parties can benefit by exchange. These three onceptions were neither natural nor easy for primitive man and some f his difficulties, notably the tendency to confuse the measure with ne thing measured, money with wealth, and to be hynotized by precious etals, remain in an even acute degree to this day and stand in the way f creating a scientific money. It is useful therefore for us to follow me of these early gropings.

CHAPTER III

GROPING TOWARDS THE MONEY DEVICE

Since money is the instrument by which exchanges are made, its existence implies the presence of exchange as a settled and normal part of human intercourse. But before exchange can have developed thus far man must have advanced to at least three conceptions: (1) that of private property; (2) that of benefit by exchange which as well as involving a logical difficulty to be indicated presently, involves some notion of relative values—how to value one thing in terms of another—which involves (3) measurement.

Take the first point, property. If the prevailing view is that everything belongs to the tribe; if what the other party to the transaction proposes to exchange is mine anyhow and mine his, we shall not discuss exchange; nor shall we if, having solved the property problem, each argues that since the other wants to get my object and get rid of his, therefore plainly he must be getting the best of the bargain and I had better stick to what I hold. And to make even a beginning in the solution of that problem we must get some standard of measurement and value, some means of knowing whether this lump of one kind of metal is worth that different sized lump of another.

Now these are not difficulties special to the savage, or to savage times. They bestrew the whole history of money. Every one of them is present, sometimes in an acute form, in present-day monetary and financial problems. We little realize the extent to which the mind of early man was addled and bedeviled by these difficulties; nor how much confusion on these points harasses our society to this very day. Some of them are indeed the confusions which stand in the way of creating a scientific money for our time, and of dealing with such tangible and pressing problems as industrial depression,

and the business cycle. It is therefore neither useless nor merely academic to consider the difficulties encountered on the road to money.

Take the problem of measurement, a standard of value. At the beginning of the last chapter a familiar type of illustration was employed to show the impossibility of mere barter as a means of carrying on the exchanges of a complex civilization. The farmer possesses calves and wants a set of false teeth. The dentist does not want calves, and if he did would not know how many calves he should get for a set of false teeth. Simple enough, we say, if we have a standard of value, say the dollar: the calf is worth twenty dollars, the set of teeth forty: two calves go to one set of teeth. And ninety-nine out of a hundred citizens to-day believe that we have in the dollar a "yardstick," as fixed and stable as the actual yardstick kept in the Bureau of Measures in Washington at a constant temperature so that its length shall not vary and which the visitor can only inspect through a telescope for fear the warmth of his breath should cause some infinitesimal variation. The truth, however, is that we have no such fixed monetary measure, and that its absence provokes economic and social difficulties which run through our whole civilization—unemployment, depression, bad business, bankruptcies. Yet its absence is not even realized, still less its significance understood. The energies of some round score of the foremost economists of the world have for several years now been directed to clarifying the confusions which have arisen around it, and which were largely the confusions of the earliest man that struggled with the problem of measurement fifty centuries or more ago.*

* A very able American business man said to me some years ago: "I have made a great deal of money and I have been on the boards of directors of a great many concerns. I haven't before heard any one talk about an unstable dollar as having anything to do with hard times; I take no stock in any such idea." . . .

I once jokingly asked my dentist—at a time when people were complaining about "the high cost of living"—whether the cost of gold for dentistry had risen. To my surprise he took me seriously and sent his clerk to look up the figures. She returned and said: "Doctor, you are paying the same price for your gold that you always have."

And measurement in the direct sense is only one of the problems which in this matter of money have addled the brains of man through the ages. The confusion between the measure and the thing it measures, the confusion, that is, between money and wealth, the belief that you can add to wealth by the simple process of adding to its tokens, has been even more devastating than the belief that a fluctuating measure is a stable one. Nor have the ethical confusions related to the difficulty of understanding how, if one party to an exchange benefits the other does not lose, been at times less mischievous, as we shall see.

It is impossible to assign chronological order to the intellectual or moral confusions and hesitations which beset the development of money.* There is much dispute among anthropologists as to the stage which marked the predominately communal phase in the conception of property. That early man went through such a phase, that it was a long one, and that it made him suspicious of exchange between members of the same tribe seems certain.

The first glimmerings of exchange are not indeed as between individuals but as between tribes, for "within the tribe goods are shared largely in common. It is looked upon as theft if a herd of cattle is slaughtered and not shared with one's neighbors, or if one is eating and neglects to invite a passer-by. Any one can enter a hut at will and demand food; and he is never refused. Whole communities, if a poor harvest befall, visit their neighbors and look to them for temporary support. For articles of use and implements there exists a universal custom of loaning, which really assumes the character of a duty; and there is no private ownership of the soil. In such a com-

Turning to me the dentist said: "Isn't that surprising? Gold must be a very steady commodity."

"It's exactly as surprising," I said, "as that a quart of milk is always worth two pints of milk." "Money Illusion," Irving Fisher (New York, 1928), p. 16.

* Even to this day the idea of money is by no means universal. "A Dyak has no conception of the use of a circulating medium. He may be seen wandering in the Bazaar with a ball of bee's wax in his hand for days together, because he cannot find anybody willing to take it for the exact article which he requires." (Ling Roth, Sarawak, II, 231.)

munity there is no occasion for direct barter. Exceptions occur when purchasing a wife and making presents to the medicine man, the singer, the dancer, and the minstrel, who are the only persons carrying on a species of separate occupation." [1]

Stanley Cook in his book on the "Code of Hammurabi" (p. 180) says: "Among primitive peoples property in land is practically unknown. Each tribe has a district over which length of custom has allowed it to wander freely and all its members share in the possession."

Eliot Rivers in his book on "Social Organization" tells us interestingly how deepseated is this tribal communism, at least in the case of some tribes. "I was traveling," he relates, "on a boat with four inhabitants of the Niue or Savage Island, and took the opportunity of inquiring into their social organization. At the end of the sitting they said they would like now to examine me about my customs, and, using my own concrete methods, one of the first questions was directed to discover what I should do with a sovereign if I should earn one. In response to my somewhat lame answers, they asked me point-blank if I should share it with my parents and my brothers and sisters. When I replied that I would not usually and certainly not necessarily do so, and that it was not our general custom, they found my reply so amusing that it was long before they left off laughing. Their attitude towards my individualism was exactly of the same order as that which we adopt towards such a custom as the couvade, in which a man goes to bed when his wife has a child, and revealed the presence of a communistic sentiment of a deeply seated kind."

It is true that Mr. H. G. Wells is rather contemptuous of the idea of very early communism. "No more nonsensical expression is conceivable in sociology than the term 'primitive communism.' The Old Man of the family tribe of early palæolithic times insisted upon his proprietorship in his wives and daughters, in his tools, in his visible universe. If any other man wandered into his visible universe he fought him, and if he could slew him." [2]

Yet if we substitute *tribal* for *primitive,* he himself explains how inevitable, in the course of fighting, is the development of a communistic attitude to property. If a group of families could so far drop fighting one another as to form a tribe they were in a position to destroy in detail separate families not capable of that degree of social cohesion. "Human society," declares Wells, "was largely a compromise, and an alliance forced upon men by the necessity of driving some other tribe out of its visible universe. If the hills and forests and streams were not *your* land or *my* land, it was because they had to be *our* land. Each of us would have preferred to have it *my* land, but that would not work. In that case the other fellows would have destroyed us. Society, therefore, is from its beginnings the mitigation of ownership. Ownership in the beast and in the primitive savage was far more intense a thing than it is in the civilized world to-day." But it had, at one stage, to become a tribal and communal ownership, and that complicated things and made members of the same tribe suspicious of exchange, barter, trade with one another, a suspicion about trade which colored the thought of Greece, of Rome, of the Christian Church, the feudal noble, the English aristocrat.

The first exchanges were not as between individuals, but as between tribes, and arose, not so much by way of trade in the economic sense as by way of presents.

Bücher explains how the thing developed: "From tribe to tribe there prevail rules of hospitality, which recur with tolerable similarity among all primitive peoples. The stranger on arriving receives a present which after a certain interval he reciprocates, and at his departure another present is handed him. On both sides wishes may be expressed with regard to these gifts. In this way it is possible to obtain things required or desired, and success is the more assured inasmuch as neither party is absolved from the obligations of hospitality until the other declares himself satisfied with the presents. The custom of reciprocal gifts of hospitality permits rare products of a land or artistic creations of a tribe to circulate from

people to people, and to cover just as wide distance from their origin as in the case of modern trade." [3]

Exchanges took place then originally between groups, and not between individuals. The slow growth of exchanges is thus explained, as each group produced most of the articles necessary for itself, and such acts of barter as took place were rather reciprocal presents than mercantile exchanges. Mr. E. B. Tylor, writing of the tribal relations of the Australian natives, says:

"It is instructive to see trade in its lowest form among such tribes as the Australians. The tough greenstone valuable for making hatchets is carried hundreds of miles by natives, who receive from other tribes in return the prized products of their districts, such as red ochre to paint their bodies with; they have even got so far as to let peaceful traders pass unharmed through tribes at war, so that trains of youths might meet, each lad with a slab of sandstone on his head to be carried to his distant home and shaped into a seed-crusher. When strangers visit a tribe they are received at a friendly gathering or corrobboree, and presents are given on both sides. No doubt there is a general sense that the gifts are to be fair exchanges, and if either side is not satisfied there will be grumbling and quarreling; but in this roughest kind of barter we do not yet find that clear notion of a unit of value which is the great step in trading." [4]

This type of contact developed until there arose as between tribes "a brisk trade in pots, stone hatchets, hammocks, cotton threads necklaces of mussel shells, and many other products." [5] But, exchange long retains the marks of its descent in the rules that are attached to it, and which are taken directly from the customs connected with gifts. Among many peoples a gift precedes or follows a deal; the "good measure" of our village storekeepers and "treating" are survivals of this custom. To decline without grounds an exchange that has been offered passes among many African brothe tribes as an insult, just as the refusal of a gift among ourselves. "Th idea that service interchanged must be of equal value can hardly b made intelligible to primitive man."

Where exchange intermingles with hospitality, or robbery, the primitive man is not confronted in any incisive way with the custom which, when he had to face it, made him for long extremely suspicious of trade altogether.

The question arises thus: If the other party desires to get rid of what he has and acquire what *you* have, he must, unless he is losing on the deal, be getting the best of it.

"If I give an equivalent in exchange for what I get, there seems to be no room for me to gain; if I have gained by an exchange, it must be because I have not really given an equivalent, but have enriched myself at the expense of the men with whom I bargained." Such, explains Cunningham, was how the Christian Church argued during the first thousand years or so of its existence, and dictated an attitude towards trade and money that in many cases has lasted till our day. "That one country was the better for intercourse with other countries was plain enough, since God had given different gifts to each, and the exchange of superfluities was desirable; but the calling of a merchant who got rich in the process of exchanging was always more or less under suspicion, as it was not possible to see, from the medieval standpoint, how his gains could be really justifiable. This was why medieval writers so strongly depreciated the action of the man who bought things in order to sell them elsewhere at a profit, and raised the price against another man who wanted to buy the same article for use on the spot. This misunderstanding, with the consequent prejudice against all commercial gain, was an element of confusion in thirteenth-century discussion of business morality." [6]

Early man did not of course argue with such conscious logic. Instinctive acquisitiveness determined his action and led him to hold on to what he had. Bertrand Russell has pointed out that man's unconscious or instinctive side is usually much less enlightened in its selfishness than his more conscious mind. Intelligence would often make us less selfish than our instinct makes us.

The explanation by which both parties benefit by exchange is

simple enough. Circumstances give one individual more of something than he can use, none of some article which he needs, but which another possesses to excess. By changing the one for the other both benefit. On this farm milk is thrown away, but the children freeze for lack of coal; in that valley the miner's children die for lack of milk. The exchange will save two groups of lives and enrich both. In all good trades both parties make a profit.

The whole difficulty is of course intimately related to the problem of measurement of value: "How many of this thing are equal to one of that?" "With primitive man," says Bücher, "value and price were by no means current conceptions. The first discoverers of Australia found invariably that the aborigines had no conception of exchange. The ornaments offered them had no power whatever to arouse their interest; gifts pressed upon them were found later strewn about in the woods where they had been cast in neglect."

The conceptions of "value," "price," "equality of service" all involve measurement, a "yardstick." How did man come to it? Much erudition has been expended and vast tomes have been written in the attempt to answer that. A completely abstract standard is, as the mathematicians tell us, an extremely difficult, perhaps impossible, idea. It is doubtful whether we can think of "two" or "three" by itself: it must be two or three of something or other. Early man had this difficulty about standards. The word "yard" comes from "gird" or "girth," being the girth of the tribal chief. "Grains" by which the precious metals were weighed were the actual grains of wheat "well dried and taken from the center of the ear" as one of the old English laws read. Obviously early man had to have some such "natural" standards. There has been much dispute (and this aspect of the question hardly seems worth the learning expended upon it) as to whether weights and measures of value were mainly derived from such natural sources or from arbitrary and scientific standards—first promulgated by the Egyptians.

But measures of distance of course are simplicity itself compared to the difficulty of measuring the relative values of entirely differen

things. "The quality of length is evident to the senses, and the conception of this quality can be gained by simply looking at an object," says one economic writer.[7] "The quality called value not only evades all examination by the senses, but its very conception is so abstract and difficult that the ablest economists are not yet fully agreed as to its statement. Little wonder, then, if the typical man should feel much satisfaction at being worth twice as many dollars this year as he was last, even if the dollars themselves are worth only half as much, or feel impoverished by a great reduction of his money values, though he could still command as many of the utilities of life as he could before."

Homer, in the seventh book of the Iliad, mentions that when

> From Lemnos Isle a numerous fleet had come,
> Freighted with wine . . .
> All the other Greeks
> Hastened to purchase, some with brass, and some
> With gleaming iron, some with hides, cattle, or slaves.

The bargaining must have been extremely difficult, and we know that before long the Greeks came to money as a way out of the difficulty. But what is noteworthy when the Greeks (who first democratized it, and on the whole used it more successfully than any ancient people) did come to money, is that they were in the habit, even to a late stage, of measuring the money by the goods, not the goods by the money, in the sense that it was common to talk of a given coin being worth so many oxen, not the ox being worth so many coins. This was so much the case that historians are in doubt whether, when Greek writers talk of "oxen" reference is to the animals or coins. Thus when Homer laughs at the folly of Glaucus, who exchanged his golden armor, worth one hundred oxen, for the bronze armor of Diomede, worth only nine oxen, we are in doubt as to whether he meant animals or coins.

Julius Pollux, in Onomasticon (ix.60) comments: "How in old times the Athenians had this (*i.e.,* the didrachm) as a coin and it

was called an ox, because it had an ox stamped on it; but they think that Homer also was acquainted with it when he spoke of (arms) worth an hundred kine for those worth nine. Moreover in the laws of Draco there is the expression, to pay back the price of twenty kine: and at the time when the Delians hold their sacred festival, they say that the herald makes proclamation whenever a gift is made by any one, that so many oxen will be given by him, and that for each ox two Attic drachms are offered: whence some are of opinion that the ox is a coin peculiar to the Delians, but not to the Athenians."

And Professor Ridgeway points out that the term, "price of twenty oxen" must have been capable of being translated into the ordinary metallic currency, whether that consisted of bullion in ingots or coined money. The "cow" therefore must have had a recognized traditional and conventional value as a monetary unit.

In any case there seems fair ground for believing that the early Greeks measured coins by commodities. It is thus diverting to find that in these early gropings towards a workable money system, the ancient Greeks, a thousand years or so before Christ, were anticipating the advocates of the compensated dollar and measuring gold by commodities, not commodities by gold. If this early distinction had been retained in the use of metallic currency vast failures and confusions would have been avoided, and we might not to-day be dominated by that "Money Illusion" of which Professor Irving Fisher writes so lucidly, but which is still so dominant.*

Professor Ridgeway [8] has attempted, with the assistance of the types on many early Greek coins, to show that the Greek units were

* "After the War, we in America knew that the German mark had fallen, but very few Germans knew it. This was certainly true up to 1922 when with another economist (Professor Frederick W. Roman) I studied price changes in Europe. On my way to Germany I stopped in London and consulted with Lord D'Abernon, then British Ambassador to Germany. He said: 'Professor Fisher, you will find that very few Germans think of the mark as having fallen.' I said: 'That seems incredible. Every schoolboy in the United States knows it.' But I found he was right. The Germans thought of commodities as rising." ("The Money Illusion," Irving Fisher, p. 5. New York, 1928.)

often in fact merely this translation into silver or other metal of an early barter unit. He contends that the coin types reveal, not only what was the staple commodity in local trade in early times, but also how much of that commodity constituted the unit of value. The types were marks of value. Aristotle had said that "the stamp was put on the coins as an indication of value," but he is as likely to have meant that the stamp was put on the coin to guarantee that it was of full weight and good quality as that it signified its purchasing power. The appearance of a sprig of olive found on the coins of Athens from the earliest times, and the religious care bestowed on the sacred olive trees, which belonged to the State, show that the olive must have been one of the most important products of Attica. It is possible, therefore, that a measure of oil was the early barter unit which the later silver coin represented. Plutarch regarded the *drachm* as worth a measure (presumably oil or corn) as well as a sheep.

At Aegina the sea turtle was the constant type on the coins from the middle of the 7th to the end of the 5th century B.C., and had replaced an earlier tortoise-shell currency. The shield on the coins of nearly all the Boeotian towns may indicate that a shield of ox-hide had been one of the early units of value in the island; the double ax, on the earliest coins of Tenedos, may have been an especial product of the island which was locally used as a medium of exchange and a unit of value; the wine cup on the coins of the Isle of Naxos suggest that a measure of wine was the unit of value which they replaced; the sheep or sheep's head on Phœnician issues at Salamis in Cyprus and elsewhere may indicate sheep unit in early use. The earliest coins of Cyzicus invariably bear a representation of the tunny fish: in a town which depended on fisheries and trade rather than agriculture, the tunny may have been a staple commodity, "and singly or in certain defined numbers, as by the score or hundred, and the like, would naturally form a chief monetary unit."

Professor Ridgeway indeed has expended vast learning in order to

prove that all our monetary units are descended from the ox. His conclusions are in part thus summarized:

> Starting with the Homeric Poems we found that although certain pieces of gold called *talents* were in circulation among the early Greeks, yet all values were still expressed in terms of cows. We then found that the gold *talent* was nothing else than the equivalent of the cow, the older unit of barter, and we found that the *talent* was the same unit as that known in historical times under the names of Euboic stater or Attic stater, and commonly described by metrologists as the light Babylonian shekel. We found that in the regions of Asia, Europe and Africa, where the system of weight standards which has given birth to all the systems of modern Europe had its origin, the cow was universally the chief unit of barter. We then found that over the area in question there was strong evidence to show that everywhere from India to the shores of the Atlantic the cow originally had the same value as the universally distributed gold unit.
>
> We drew the conclusion that the gold unit, which was certainly later in date than the employment of the cow as a unit of value, was based on the latter; and finally we showed that man everywhere made his earliest essays in weighing by means of the seeds of plants, which nature had placed ready to his hand as counters and as weights.[9]

Some relation indeed between the ox and defined weights of metal would seem to go back before even the time of Homer, to that Mycenaean offshoot of the Cretan civilization which flourished two thousand years before Christ and appeared upon the mainland of Greece. In the district to the west and south of the isthmus of Corinth (Argolis) there has been found beneath the Palace of Mycenae a copper ingot about 2½ feet long in a shape which is said to represent a hide stretched to dry (with no head or tail). This may even be as old as the 14th century B.C., and suggests a transition from the live ox unit to metals by way of a representation of the shape of the hide. Other specimens found off the coast of Euboea suggest that in the circulation of the ingots extended to Attica. A tablet found by Sir Arthur Evans at Knossos, which seems to equate ox-hide ingots of copper with talents of gold, points to their circulation in Crete. These ingots are of a shape that cannot have rendered

them particularly useful; they may have been so shaped to make them convenient to lash. They were of fixed weights which formed a series of multiples, and they often bore a stamp, and it is probable that bronze in this form, Mr. A. R. Burns[10] thinks, circulated as a currency in the Eastern Mediterranean for six or seven hundred years into the Homeric Age, when copper was certainly used for many payments. "The advent of weighing made it possible to dispense with definition by measurement, and then the pieces lost their old shape. These lumps or bars, known to ancient writers as *as rude* (raw copper), were, according to Pliny, the common means of payment until the time of Servius Tullius (in the middle of the sixth century B.C.). By 451 B.C. the *as* must have been common as a means of payment, for in that year the Tarpeian Law, while continuing to express fines in terms of sheep and cattle, made provision for their payment in marked *ases*."[11]. The cattle unit died hard, for twenty years later it was necessary to order by law (the lex Papiria) that payments in copper should replace payments in cattle.

We have dealt so far with three main conceptions, necessary for the maintenance of exchange: the conception of property, some conception of the way in which both parties can benefit by exchange, and some conception of value, measurement. And we have seen with reference to measurement that there was a tendency at first to measure money by goods, rather than goods by money, a capacity to think, that is, of money falling in value, not of goods as rising, a capacity which, Professor Irving Fisher tells us, so many modern American business men lack.

Once, however, men became habituated to the use of the precious metals in the shape of coins as a medium of exchange, they began to fall into the greatest of all money errors, the error of mistaking the measure for the thing measured, which is in the same category of fallacy as that which prompted the mobs, after the reform of the

calendar, to storm government offices to the cry of "Give us back our eleven days," since they were sure the new calendar had robbed them thereof. The common use of money gave rise to the notion that men could increase wealth indefinitely by increasing the thing in which they measured it—the precious metals, or even the tokens of the metals—so that we have had a never-ending succession of de basements or inflation of currency, mercantilist and bullionist fal lacies and monetary bedevilments of all kinds. Men have seriously assumed that wealth consists, not in the acquisition of things to ea and wear and use—which as a rule nations have resented receiving as witness the tariff barriers of the civilized world—but in gold, o "money," which nations throughout all history have scrambled fo as a superior kind of wealth.

How did man fall into this particular error, especially since som early peoples like the Greeks seem to have been fairly free from it

There are several reasons. The confusion between the token o symbol of measurement and the thing itself is not confined t money. The peasants who on the reform of the calendar clamore for their lost eleven days, illustrated the tendency in other fields And in the case of coined money the tendency is intensified by th fact that the metal is itself a valuable commodity usable in the arts and valuable not merely from its utility, but in itself, because of it rarity, in the sense that diamonds are more valuable than paste which æsthetically is as good.

Men desire things which are rare in themselves and the possessio of which confers distinction. This is peculiarly the case in earl times with gold.

"Wherever we come across man on the surface of the globe," say Mr. Babelon,[12] "we find that it is the superfluous which by instinc seems to him the most necessary; man has scarcely learnt the us of clothes before he hangs onto his neck, his arms, his legs, his ear necklaces, bracelets, rings and pendants of every shape, in the mar ufacture of which the precious metals are always and everywher preferred. Ever since the beginning of the world, the pursuit of gol

and silver has dominated everything; ages before the invention of money and the appearance of the legislator nations made war with each other for the possession of the precious metals, organized for their acquisition large and perilous expeditions, which have left their memory in history and in fable, such as the expedition of the Argonauts in search of the Golden Fleece, the adventures of Hercules in the Garden of the Hesperides, and the voyages of the ships of Tyre and Sidon to the country of Tharsis."

Precious metals which were passionately sought for purposes of adornment naturally became the means of making provision for the future, and of reckoning wealth. They served at one and the same time the purposes of ornament and of money. The possession of gold and silver ornaments gave distinction and social prestige to the owners. Every one prized the precious metals, therefore, and in consequence their general acceptability made them most desirable commodities for monetary purposes.

Given these considerations, it was almost inevitable that money so arrived at, and with these particular associations, should be confused with wealth, and that even when money had assumed other forms the same confusions were perpetuated.

There are further reasons of a physiological nature which we shall deal with in considering the Bullionist or Mercantilist phase of European monetary policy, but a factor sometimes introduced as explaining man's early hypnotism by gold is the part that it has played in magic and sorcery.

Professor Elliot Smith, in explaining the association of gold with "good luck" magic, points out that long before the use of gold, men and women had been accustomed to wear necklaces, bracelets and girdles made of shells, the teeth of animals, the vertebræ of fish, and beads made of such materials as red carnelian. These objects were chosen at first, not primarily for æsthetic reasons, but because they were believed to exert a magical influence, protecting and strengthening the wearer. "The shells and carnelian beads were symbols of life-giving in the wider sense of death-averting. The

teeth of ferocious animals were believed to protect the wearer, since they conferred powers of aggression upon their original owners. The vertebræ were symbols of strength and stability, the uprightness of a body with a vertebral column. But when gold was introduced for making models of the life-giving shells, the lightness and beauty of the objects not only added to its magical reputation as the incorruptible substance of immortality and divinity, but also made it attractive for its own sake. That appeal of gold as a material for making jewelry which first arose out of its magical use has survived throughout the sixty centuries since it first came into fashion." [13]

It is Professor Elliot Smith's view that the earliest currencies, cowries, grains of barley, cattle, and gold were all "surrogates of the Great Mother." "The arbitrary value originally attributed to these various objects was so tremendously enhanced when they became identified with the Great Mother (and so acquired a magical potency) that they passed into currency. At the time of Tutankhamen, barley was the currency in Egypt, and for many centuries the grains of this cereal had already been regarded as repositories of vital substance, as forms of the Corn Mother, or, more correctly, as the Barley Mother. But in the tombs of Tutankhamen's immediate predecessors and successor figures of the god Osiris, made of germinating grains of barley, were put into the burial chamber magically to convey to the dead Pharaoh the life-giving properties of the Great Mother in the act of giving life to the sprouting barley." [14]

Professor Elliot Smith concludes therefore:

> When a metal is credited with possessing a divine character, and is regarded as potent to protect life, it is naturally sought after by people anxious to secure such powerful religious and social aids. But the mere desire to obtain it confers upon the metal a value apart from its imaginary potency as a spell worker. Hence, gold became the material of tribute paid by one State to another. It was identified with the divine life of the gods, and was lavished upon the mummies of dead kings to ensure their attainment of the divinity of celestial beings. In course of time its arbitrary value and religious reputation made it the material of currency—not merely a standard

of values, but the instrument whereby commercial development has been rendered possible.[15]

Certain obvious facts cause one to enter a caveat or two. Gold was neither the earliest nor the only monetary metal. For ages, over wide spaces of the earth, silver had precedence as a metal for coins. Bronze and copper also figure largely. The precious metals were never coined in ancient China, for instance, bronze being until recent times the metal of such coinage as she possessed.

The monetary standard has changed many times from substance to substance in the various nations of the East and the West during the course of the world's history. M. Babelon thus summarizes the general trend of early changes in the Hellenic world and in ancient Italy: "After barter pure and simple, came cattle money, then utensil money, then iron, copper, gold and silver, estimated by weight, then copper and iron money. Finally we see copper and iron money giving place to money of silver and gold."[16]

Among the ancient philosophers and poets the belief was common that gold and silver had had a most baneful influence on the human race, that to the greed which they engendered could be traced crimes against every dictate of justice—a feeling concisely expressed in Virgil's famous line,

> Quid non mortalia pectora cogis,
> Auri sacra fames!

It is not always clear whether these denunciations are aimed at the use of money as such, or at the greed for wealth in general of which the desire for money is only an expression.*

* Mr. Arthur Eli Monroe in his "Monetary Theory Before Adam Smith" points out that Aristotle devotes considerable attention to this point in a characteristically difficult passage, and seems to hold that the use of money, by leading to retail trade, in which money itself is the goal of exchange, has so blinded men to the true limits of desirable acquisition, that they go on piling up coin under the impulse of their endless desires, some even assuming money to be wealth. Money thus serves to accentuate a bad tendency. It has also, in this way, given rise to the evil of usury, which he regards as "the most hated kind of trade." On the other hand, by facilitating exchange, money promotes association, and hence all life in society, which is indispensable to man's highest development. (p. 6. Cambridge, Mass., 1923.)

Indeed it should be added that Professor Elliot Smith by no means has it all his own way when economists analyze his theory. Mr. A. R. Burns * sums up as follows:

> That men began to work gold solely for the purpose of imitating cowry shells, the core of Prof. Elliot Smith's theory from the economic point of view, is entirely unproved. Some modern psychologists contend that metal coins in general, but gold in particular, are valued because, for definite psychological reasons, they are particularly associated with our sense of possession. The popular confusion between money and wealth is not, therefore, to be ascribed alone to inadequate diffusion of economic knowledge. The importance attached to the gold standard, on the other hand, is not the result of pure economic thought; it also is the product of this symbolism. The psychological factors behind the present high value of gold are somewhat different from those of primitive times. The most important modern demand arises out of its monetary use, either directly in coins or indirectly in reserves. This use is founded on the relative stability in the value of gold which results from the absence in recent years (if we may exclude years of war) of rapid variations in either the demand for or the supply of gold.

That we still value a thing just because it is rare is indicated by the recent tendency to supersede gold by platinum in jewelry. Platinum, while being harder, is much less attractive in appearance than silver, which possesses a finer luster, yet silver has already fallen into disuse for jewelry. Mr. Burns adds a word on the discussion of the "luck" question with which most of us will have no difficulty in agreeing. "Gold," he says, "if once used as a magical means of securing good luck, is now a certificate of its enjoyment."

*"Money and Monetary Policy in Early Times," A. R. Burns (p. 20. London, 1927.

CHAPTER IV

THE FIRST MONEY

What is money? Some definitions; and illustrations. Coins not the first money. A long list of things that have served and still serve for money. The very earliest coin of all. Commodity money of Colonial times. The "wooden" money of the British Exchequer tally sticks. The strange story of the invisible stone money of the Island of Uap.

CHAPTER IV

THE FIRST MONEY

To read the story of money we must have in our minds some pretty clear understanding of the term. What is money? When, in a story of this kind one speaks of shells or cattle or salt or tobacco being "money," what does one mean?

Money has been defined by Walker as that which every one receives without the slightest reference either to his own need or to the credit of the person who offers it. "When," he says, "an article reaches this degree of acceptability it becomes money, no matter what it is made of and no matter why people want it." [1]

But Jevons has a warning about definitions, which may be recalled here.

"Much ingenuity," he says, "has been spent upon attempts to define the term money. . . . All such attempts at definition seem to me to involve the logical blunder of supposing that we may, by settling the meaning of a single word, avoid all the complex differences and various conditions of many things, each requiring its own definition. Bullion, standard coin, token coin, convertible and inconvertible notes, legal tender and not legal tender, checks of several kinds, mercantile bills, stock certificates, etc., are all things capable of being received in payment of a debt, if the debtor is willing to pay and the creditor to receive them; but they are, nevertheless, different kinds of things. By calling some money and some not, we do not save ourselves from the consideration of their complex legal and economical difference." [2]

One may, however, attempt a broad definition. By "money" economists usually mean anything that is (1) passed from hand to hand in payment for commodities and service, and (2) regularly

taken with the intention of offering it in payment to others, and (3) customarily received without assay or other special test of quality or quantity, and (4) received without reference to our reliance upon the personal credit of the one who offers it.

The usual definition of the *functions* of money are that money is a medium of exchange, a measure of value, a standard of deferred payment and a store of value. (Which can be memorized in a jingle: "Money is a matter of functioning four, a medium, a measure, a standard, a store.") With reference to these functions of money Jevons has pointed out that we are so accustomed to use the same substance in all the four different ways that they tend to become confused together in thought. We come to regard as almost necessary that union of functions which is, at the most, a matter of convenience, and may not always be desirable. We might certainly employ one substance as a medium of exchange, a second as a measure of value, a third as a standard of deferred payment, and a fourth as a store of value. In buying and selling we might transfer portions of gold; in expressing and calculating prices we might speak in terms of silver; when we wanted to make long leases we might define the rent in terms of wheat, and when we wished to carry our riches away we might condense it into the form of precious stones. This use of different commodities for each of the functions of money has in fact been partially carried out.*

These definitions as applied to the great variety of things (the chief of which are described in this chapter), that have been used as money, may be clarified by illustration. If an early herdsman needing wheat goes to a neighbor who has grown some and who needs a cow, and offers him such a cow, taking the wheat in exchange, that plainly is barter and his cow is not money. But if the farmer has already more cows than he needs for his farm, and, though giving his wheat for yet another one, takes that one to the

* In Queen Elizabeth's reign silver was the common measure of value; gold was employed in large payments in quantities depending upon its current value in silver, while corn was required by the Act 18th Elizabeth, c. VI (1576), to be the standard of value in drawing the leases of certain college lands.

village and exchanges it for a plow, knowing that every one will accept cattle in exchange for things they have for sale, this is not barter but sale and purchase by cattle used as a medium of exchange, as money. The principle is of course the same when we come to gold. When gold becomes money we acquire it, not as a rule for itself, but because we can use it as the means of obtaining anything saleable that we may happen to need. The gold as the standard money may be represented by discs of copper or silver or paper, which thus become representative or token money.

One undisputed fact in the history of money is that coins were not the first money. Indeed, as Mr. A. R. Burns says, "coinage was a surprisingly late addition to the human heritage of economic knowledge." [3] It will help us to realize the nature of money if we can realize how many commodities have served as money, and how very recently.

We have touched in a previous chapter upon some of the psychological reasons which would cause ornaments to become, at a very early state of human development, a medium of exchange.

In tropical climates, where clothes are not wanted, and food only needs to be gathered, the chief objects of desire, of course, are not food and clothing, but trophies and ornaments. These can be stored up, and, especially if they are thought to be the homes of powerful spirits, they may become valuable. From earliest times shells have formed one of the simplest and most universal kinds of adornment. Strings of cowries under their various names of changos, zimbis, bonges, or porcelain shells are universally esteemed, portable and durable, and as such have been widely used for money. They come from a small mollusk found in the shallow spots of the Indian Ocean, and are used by all the inhabitants of that geographical area washed by its waters. These shells are white or straw colored, about an inch long, glistening and clean. They constituted what was probably the first money in all the world, the medium of exchange for dense populations, and served many men for many generations. The last ambitious stand of the cowry was made on the west coast of Africa,

where it was in general use as money a generation ago. It is still current in isolated communities in Africa, India, and the South Seas, but has practically given way to the advance of the moneys of commercial nations.[4] Its relative value varies slightly according to its scarcity or abundance. In India the usual ratio used to be about 5,000 to the rupee. Marco Polo found the cowrie in use in the province of Yunnam. He says, "In Carajab gold is so abundant that they give one saggio of gold for six of the same weight of silver. And for small change they use the porcelain shell. These are not found in the country, but are brought from India." But Marco Polo gives only a comparatively recent account of the use of cowries, for Layard found them in the ruins of Nineveh.

In Melanesia shell and stone money have been pushed to a remarkable development. On the Solomon Islands there are some communities which occupy themselves solely with fishing and making shell bead money. Oddly enough, pigs are used side by side with cowries in Melanesia, but they are not called money and are used only within the group, for fines, penalties, contributions to feasts, fees in the secret society, and payment for wives.

The shell money of New Britain had very great influence on the lives of the people. Every life taken and every wound received in war must be paid for in this money. "Its influence is supposed to extend even to the next life. There is not a custom connected with life or death in which this money does not play a great and leading part. . . . Take away their money and their secret societies sink at once into nothing." [5] This money consists of small cowry shells strung on strips of cane. In Duke of York Island it is called Dewarra, and it is measured in lengths, the first length being from hand to hand across the chest with arms extended, second length from the center of the breast to the hand of one arm extended, the third from the shoulder to the tip of the fingers along the arm, fourth from the elbow to the tip of the fingers, fifth from the wrist to the tip of the fingers, sixth finger lengths. Fish are generally bought by the length in Dewarra unless they are too small. A large

pig will cost from 30 to 40 lengths of the first measure (fathom) and a small one 10 lengths. The Dewarra is made up for convenience in coils of 100 fathoms or first lengths; sometimes as many as 600 fathoms are coiled together, but not often, as it would be too bulky to remove quickly in case of invasion or war, when the women carry it away to hide. These coils are very neatly covered with wickerwork like the bottoms of our cane chairs.[6]

In Malaita, one of the islands of the Solomon group, porpoise teeth are the favorite kind of money. The natives drive a school of porpoise into shallow water, where they smother themselves in mud, and the teeth are then extracted and made into money. The natives of Fiji, too, are said to have employed whale's teeth as currency, red teeth (which are still highly prized) standing to white ones somewhat in the ratio of five dollars to twenty-five cents with us. And in German New Guinea the bent tusks of a boar are used as currency.

Dentalium is a kind of snail whose shell has been highly valued in different parts of the world. In the Queen Charlotte Islands it was recognized as a medium of exchange by most of the coast tribes, though not so much as a medium of exchange for themselves as for barter with the Indians of the interior. In Washington Territory dentalium and abelone shells were the money, varied by slaves, skins or blankets, until the closer contact with whites produced changes. The Karok used as money the red scalps of woodpeckers, which were rated at from $2.50 to $5.00 each, and also dentalium shells of which they ground off the tip. The slaves who were merely used as money here were fortunate, as other slaves were frequently killed and their flesh used as bait in catching these snails.

Feathers are highly valued in the South Seas to-day, and the young men of the Santa Cruz Islands use a feather currency for buying their wives. This money is made from the red headdress of a tiny jungle bird. To catch it the natives fill a shell with a sticky sap, and imitate the call of the bird to lure it to this trap. The bird comes, gets its feet caught in the sticky sap, and is easily taken. The feathers are then attached with resin to the outside of coils, inside of which

are charms, each possessing a protective property. This money is very rare, and, if shown, may be handled only by the owner.

"At Moko and Utuan they use a little bivalve shell, through which they bore a hole and string it on pieces of native-made twine. It is also chipped all round until it is a quarter of an inch in diameter and then smoothed down into even discs with sand and pumice. Here we find strings of shell, which undoubtedly in the first instance were used for personal adornment, converted into a true currency. The simple savages, whose possessions were exceedingly few and scanty, equated their fish to strings of shells which formed their only ornament, and when they got a more valuable possession in the pig, they quickly learned to appraise that animal in shell worth, just as the North American Indians learned to estimate the horse in *wampum*."[7]

The first settlers of New England found wampumeage, sometimes called wampum and sometimes peage, in use among the aborigines as an article of adornment and a medium of exchange. It consisted of beads made from the inner whorls of certain shells found in sea water. The beads were polished and strung together in belts or sashes. They were of two colors, black and white, the black being double the value of the white. The early settlers of New England, finding that the fur trade with the Indians could be carried on with wampum, easily fell into the habit of using it as money. It was practically redeemable in beaver skins, which were in constant demand in Europe. The unit of wampum money was the fathom, consisting of 360 white beads worth sixpence the fathom. In 1648 Connecticut decreed that wampum should be "strung suitable and not small and great uncomely and disorderly mixt as formerly it hath been." Four white beads passed as the equivalent of a penny in Connecticut, although six were usually required in Massachusetts and sometimes eight. In the latter colony wampum was at first made legally receivable for debts for the amount of 12d. only. In 1641 the limit was raised to £10, but only for two years. It was then reduced to 40s., but in Massachusetts it was not receivable for

taxes. The use of wampum extended southward as far as Virginia.

The decline of the beaver trade brought wampum money into disrepute. When it ceased to be exchangeable in large sums for an article of international trade the basis of its value was gone.

Moreover, it was extensively counterfeited, and the white beads were turned into the more valuable black ones by dying. Nevertheless it lingered in the currency of the colonies as small change till the early years of the eighteenth century, and while it was in use it fluctuated greatly in value.

The first local currency of New Netherlands was wampum, but it was subordinate to the silver coinage of the mother country; that is, it was reckoned in terms of that coinage as fixed by the Dutch West India Company from time to time. It was first fixed at six white beads for a stiver. Wampum was not made in the province, but was imported from the east end of Long Island, the principal seat of production. It is mentioned in a letter from the Patrons of New Netherlands to the States General in June, 1634, as "being in a manner the currency of the country with which the produce of the country is paid for," the produce of the country being furs.[8]

When the Americans pushed west to California they found a curious corroboration of the fact that money often grows out of the things that are most prized for ornaments. The dentalium strings referred to above are called *al-li-kochik* (in Yarok this signifies literally Indian money), not only in the Klamath but from Crescent City to Eel River, though the tribes using it speak several different languages. When the Americans first arrived in the country an Indian would give forty or fifty dollars in gold for a string. What would the Indians do with the white man's money? The answer seemed to them obvious. "Some of the young bloods array their Dulcineas for the dance with lavish adornments, hanging on their dresses 30, 40 or 50 dollars worth of dimes, quarter dollars and half dollars arranged in strings."[9] Thus even the American dollar has served the double purpose of ornament and money. But in the early days of California there were not always coins enough for the

buying and selling transactions of everyday life, let alone the ornamentation of savages. When California was first invaded by gold-seekers there were a few Mexican coins in circulation there, though not nearly sufficient to answer the needs of the growing community. The immigrants brought more or less metallic money with them. The smaller coins were those of many different countries, chiefly Spanish. For want of sufficient coins, the first trading was done largely with gold dust, sometimes by weighing it in scales, and sometimes by guesswork. A "pinch" of gold dust about as large as a pinch of snuff had a current value and was common measure in places where there was no means of weighing. At a public meeting in San Francisco, September 9, 1848, it was resolved by unanimous vote that $16 per ounce was a fair price for placer gold.[10]

Farther north the blanket of the trader soon supplanted the beaver-skin as the principal unit. The blankets used in trade were distinguished by the points or marks on the edge, woven into their texture, the best being four-point, the smallest and poorest one-point. The acknowledged unit of trade was a single two and a half-point blanket. Everything was referred to this unit, and even a large four-point blanket was said to be worth so many *blankets*.[11]

Even where there is no shortage of the circulating medium, money has not always, of course, developed out of ornament. Bars of crystal salt are money in many parts of Ethiopia, and this money suffers deterioration in a novel way. It has become a nice courtesy, when meeting a friend, to proffer a coin to be licked. Thus in Ethiopia good manners are a luxury, and one's politeness varies directly with one's pocketbook.

Of the oxen of the ancient Greeks as money, the preceding chapter has treated.

In much of the ancient Europe of Homer's day cattle were the usual medium of exchange, whence the Latin word *pecunia* (money, from *pecus,* cattle). In our own language the word "cattle," or "chattel," has come to include all property. In the Zend-Avesta the payment of physicians is calculated in the same way

but comparatively few realize that when we pay our doctor his fee we are doing the same thing, for our word "fee" is the old word *vieh,* which in German still retains the sense of cattle. And, to this day, cattle are used as money. The Ossetes of the Caucasus at the present moment employ the cow as their unit of value, the prices of all commodities being stated as one, two, three, or four cows, or even at one-tenth or one-hundredth of the value of a cow. The ox is worth two cows, and the cow is worth ten sheep. This people regulate compensation for wounds thus: They measure the length of the wound in barley corns, and for every barley corn which it measures a cow has to be paid. There seems to be little doubt that over all Hither Asia the same method of employing the cow as the principal unit of value obtained.

Passing on to the mainland of Asia many types of money appear. Chinese currency has been widely varied. Says Du Halde, on the money that at different times has been current there: "There was also money made of tin, lead, iron, and even baked earth, on which figures and characters were imprinted. It is related that after the reign of Han (B.C. 2119), a prince caused money to be made of stamped earth united with a strong glue, and taking it into his head to put down copper money, he gathered as much as he could, buried it very deep in the earth, and killed the workmen that were employed about it, that none might know where it was hidden." [12]

Cowries appear in the *Ya-King,* the oldest Chinese book, 100,000 dead shellfishes being an equivalent for riches. Tortoise of various kinds and sizes was used for the greater values which would have required too many cowries, and tortoise shell is still elegantly used to express coin. Several kinds of *Cypraea* were used, including the purple shell, two or three inches long; all the shells except the small ones being employed in pairs. A writer of the second century B.C. speaks of the purple shell as ranking next after the sea tortoise shells, measuring eighteen inches, which could only be procured in Cochin China and Annam, where they were used to make pots, basins, and other valuable objects. So attached were the Chinese to these primi-

tive coins that the usurper Wangmang restored a shell currency of five kinds, tortoise shell being the highest. From this time we hear no more of cowries in China Proper, but they left traces of themselves in the small copper coins shaped like a small *Cypraea,* called Dragon's eye or Ant coins. It is doubtless to a similar survival that we owe those curious silver coins made in the shape of shells which come from the north of Burma and of which there are several specimens in the British Museum. They are about the size of a cowry, and doubtless served as a higher unit in a currency of which the lower units were formed by real shells.

Agricultural implements, too, reached a high development as money in China. Small tools, such as adzes, bill-hooks, spades, chisels, and planes, were there used as currency for a long period. Knives began to be used in the seventh century B.C. in Shantung, and continued in circulation until 221 B.C., when they ceased to be recognized; they were revived for a brief period in a sharpened and thicker form in A.D. 7. They may have been bill-hooks or possibly graving knives, the point being used for writing and the edge for erasing; the length of these knives was fixed by law. Spades or hoes with hollow handles were in two sizes from about 600-350 B.C. The weighing of metal for currency did not prevent the continued use of these implements, which then passed by weight.

An interesting phase of this use of implements as money lay in the development of the "cash," a form of money which is still in use to-day. Knives and pieces of cloth had already been long in use as a measure of value, much as gray shirting is used in India even now. About the twelfth century B.C. it occurred to the Chinese government that for purposes of exchange it would be an advantage to substitute for various objects in common use, such as knives, pieces of cloth, hoes, sickles, spades, etc., small metal models which might represent the objects themselves. This they did, and there are two principal kinds of coins—the "pu" coins, roughly resembling a shirt, and the "tao" or knife coins, which are in the form of a knife. The word "pu" means cloth, and "tao" a knife. The specimen of pu money

represented in the frontispiece dates probably to 700 B.C., but the dates of early Chinese coins are sometimes difficult to ascertain with accuracy. The specimen of tao money is also of early date,—probably the Tchou Dynasty, about 300 B.C. On the obverse is "Currency of Tsi-Moh City," and on the reverse "Three ten Star." These forms, however, were very inconvenient, and the blade was gradually shortened while the end of the handle, which was pierced by a hole so that the coins might be strung on a string, was enlarged. The inscription is "Yh tao ping wutsun," *i.e.*, One tao equal to 5,000 (cash). Finally the blade disappeared, and the circular handle alone remained, with the hole in the middle, for, as the Chinese said, money which is meant to roll round the world should itself be round. This change took place about 200 B.C., and thus originated the form still in use and known as "Cash." The coin bears a mark like a new moon. This originated in an accident very characteristic of China. In the time of the Empress Wenteck, 620 A.D., a model in wax of a proposed coin was brought for Her Majesty's inspection. In taking hold of it she left on it the impression of her thumb-nail, and the impression has in consequence not only been a marked characteristic of Chinese coins for hundreds of years, but has been copied on those of Japan and Korea.[13]

Some of the non-metallic objects which have served as money can only be regarded as fiat money, occupying a place analogous to irredeemable paper with us.

It was in the reign of Wu-ti, B.C. 140, that the first paper—or parchment-money of which we have an account was issued in China, although coins covered with leather or parchment were used as money in Carthage nearly three centuries previous to this date. The notes were called p'i pi or skin notes, and they were made of white stag skin, a Chinese foot square, each note representing 40,000 chuen.

This type of money, by the way, suggests interesting possibilities. The size of the herd of Imperial Deer would impose a limit to sudden inflation, while at the same time leaving a scope for gradual expansion to keep pace with the growth of population and trade; the

special markings would be a protection against forgery. If th Chinese could have been brought to look upon this particular skin a the modern chorus girl looks upon sable skins or silver fox, Chin might have made another contribution to the world's civilizatio

On the west coast of Africa little mats were stamped by the Po tuguese government and used as money. Mat money was also use in the New Hebrides, especially to buy grades in the great secr society. The mats are long and narrow, and are more esteeme when they are old and black from the smoke of the huts. Indee they are kept in little houses where they are smoked until the hang with soot.

Egypt, too, has experimented with fiat "object" money. Durin the reign of the Fatimite caliphs, A.D. 909-1171, the money in Egy was made of glass, and was used—possibly continuously, but certainl at intervals—for upwards of six hundred years, for it was curre under the Mameluke sultans so late as the year 1766. "It will not b disputed," says Del Mar (in support of his argument that ancie peoples "managed" their currency) "that these pieces derived the value from their number, and not from the worthless material which they were composed. It is greatly to be regretted that n records have been preserved of the emissions, and the effect of suc emissions upon prices. It is possible that the Fatimite caliphs we virtuous or wise enough to restrain these emissions within prop limits, and even to make publicly known what these limits wer but it is too much to suppose that their successors pursued a lik enlightened policy. In all probability, the glass coins of Egypt fo lowed the fate of all overvalued moneys in ill-governed or ignora countries; they were issued without number and without limit, un they either fell to the value of the material which composed the and which, in the case of glass, clay, or paper, would in the er render them useless for money, or were issued to such an excess to fall to a very low value, and serviceable only in the smallest a least important exchanges." [14]

When we come to the metals used systematically as money it

mportant to remember that, as already noted, they were not first ısed in the form of coins. In the case of the ancient Egyptians netals by weight, dealt in as a commodity, served as money of ıccount in such exchange transactions as that nearly moneyless civiization knew. These ingots ultimately came to be stamped with ;eals, the ingots became smaller, and there resulted coins.

The earliest Western coinage was either that of Lydia, or of Pheidon, struck in Aegina. The claims of Pheidon, King of Argos, :o have made this useful invention rest on a passage in the Parian marble. It is not, however, very clear, and if Pheidon made them we should have expected them to have been struck in his own city of Argos, and not at Aegina. Herodotus is probably more nearly correct when he says that the "Lydians were the first of all nations we know of that introduced the act of coining gold and silver." [15] In any case the earliest coins we have are Lydian, and oval in form. They are perhaps stamped ingots rather than true coins, for one side presents merely a striated surface. The reverse presents three incuse depressions, the two outer ones square, the one in the center oblong, and enclosing some animal or other ornament. They marked the beginnings of the Greco-Roman monetary history dealt with in the first chapter.

It was some three hundred years later that a coin, which was perhaps the most beautiful coin the world has ever seen, was struck in Syracuse. The obverse is a head of Persephone, decked with corn leaves, and surrounded by dolphins; the reverse a quadriga, and Victory flying above it to crown the charioteer. In this case we know the artist who made the die—Euainetus, for his initials, E. Y., appear behind the neck of Persephone.

Most numismatists perhaps incline to the view that the real birthplace of coining was Lydia, and the coins were produced not by the king or the state but by private merchants. But this period of private coinage was brought to an end when the picturesque Gyges, who had himself been a good deal of a merchant and amassed great wealth, seized the crown. He also seized the occasion to stop all

competition by claiming coinage as the prerogative of the kin

Until the coming of the father of Croesus as King of Lydia— period of nearly two hundred years—the coins were made of ele trum (an amalgam of gold and silver), probably because the mixtu was found naturally in the country. As the metal was an amalgar it was very easily debased (the gold declined at times to five pe cent of the mass), and this was probably one of the reasons why was abandoned for pure gold and pure silver. It was Croesus wh definitely abandoned electrum in favor of gold and silver coine separately.

Although the first known coins are those from Lydia it is probab that both in Aegina and Corinth coins appeared almost simu taneously, but made of silver which remained the favorite monetar metal of Greece.

So far we have considered mainly the "article currency" either c civilized people centuries ago, or of contemporary savages. But it interesting to realize that it was not so very many years ago tha civilized people were using for money things which would seer very strange to us to-day. In America, among the early settler beaver-skins were widely used as money, but, unlike wampun which was used for no purpose except currency, they had intrinsi value in themselves which was recognized in Europe, and so beave skins were used for export rather than for purposes of internal trad Farm produce was another form of currency, and one in which taxe were frequently levied, and, as far as was possible, the Colonia Governments controlled the prices of commodities and voted fror year to year the rates at which various grains and other produc would be received in payment of public dues. For larger sum cattle were often used, but the finest animals were not brought i for this purpose, and the struggle against lean cattle was a standin difficulty for the tax collectors. A varied assortment of produce wa collected at the Government offices, and not infrequently th Treasury had to be relieved of redundant merchandise by selling at a loss when the market price fell below the Government rate

Produce pay only went out gradually; for a long time salaries were paid partly in coin and partly in merchandise, and it was not until 1670 that Massachusetts repealed the law that made corn and cattle the equivalent of money. Many other commodities were used as money in the different colonies; Rhode Island, for instance, constituted wool at the rate of 1s. per pound a standard of value for assessing rates in 1674; the Assembly of South Carolina as late as 1720 made rice legal tender for the payment of taxes, whilst sugar, rum, molasses, indigo, and skins all served as money at different times and in different localities.[16] Horace White, in his *Money and Banking,* has given an interesting account.

The first General Assembly of Virginia met at Jamestown, July 31, 1619, and the first law passed was one fixing the price of tobacco "at three shillings the beste, and the second sorte at 19d. the pounde." Tobacco was already the local currency. In 1642 an act was passed forbidding the making of contracts payable in money, thus virtually making tobacco the sole currency. The act of 1642 was repealed in 1656, but nearly all the trading in the province continued to be done with tobacco as the medium of exchange.

In 1628 the price of tobacco in silver had been 3s. 6d. per pound in Virginia. The cultivation increased so rapidly that in 1631 the price had fallen to 6d. In order to raise the price, steps were taken to restrict the amount grown and to improve the quality. The right to cultivate tobacco was restricted to 1,500 plants per poll. Carpenters and other mechanics were not allowed to plant tobacco "or to do any other work in the ground." These measures were ineffective. The price continued to fall. In 1639 it was only 3d. It was now enacted that half of the good and all of the bad should be destroyed, and that thereafter creditors should accept 40 pounds for 100; that the crop of 1640 should not be sold for less than 12d., nor that in 1641 for less than 2s. per pound, under penalty of forfeiture of the whole crop. This law was ineffectual as the previous ones had been, but it caused much injustice between debtors and creditors by im-

pairing the obligation of existing contracts. In 1645 tobacco wa worth only 1½d. and in 1665 only 1d. per pound.

In the year 1666 a treaty was negotiated and ratified between th colonies of Maryland, Virginia, and Carolina, to stop planting to bacco for one year in order to raise the price. This temporary suspension of planting made necessary some other mode of paying debts. It was accordingly enacted that both public dues and privat debts falling due "in the vacant year from planting" might be paic in country produce at specified rates.

In 1683 an extraordinary series of occurrences grew out of the low price of tobacco. Many people signed petitions for a cessation o planting for one year for the purpose of increasing the price. A the request was not granted, they banded themselves together an went through the country destroying tobacco plants wherever found The evil reached such proportions that in April, 1684, the Assembl passed a law declaring that these malefactors had passed beyond th bounds of riot, and that their aim was the subversion of the govern ment. It was enacted that if any persons, to the number of eight o more, should go about destroying tobacco plants, they should b adjudged traitors and suffer death.

In 1727 tobacco notes were legalized. These were in the natur of certificates of deposit in government warehouses issued by officia inspectors. They were declared by law current and payable for al tobacco debts within the warehouse district where they were issue They supply an early example of the distinction between money o the one hand, and government notes, or bank notes, on the othe The tobacco in the warehouses was the real medium of exchang The tobacco notes were orders payable to bearer for the delivery c this money. They were redeemable in tobacco of a particular grad but not in any specified lots. Counterfeiting the notes was made felony. In 1734 another variety of currency called "crop notes" wa introduced. These were issued for particular casks of tobacco, eac cask being branded and the marks specified on the notes.[17]

The eighteenth-century New Jersey note (here reproduced) whic

bears a tobacco leaf, testifies to the wide acceptance of the idea of tobacco as money, or as the backing for paper money.

In 1719 the Assembly of South Carolina made rice receivable for taxes, "to be delivered in good barrels upon the bay in Charlestown." In the following year a tax of 1,200,000 pounds of rice was levied, and commissioners were appointed to issue rice orders to public creditors, in anticipation of collection, at the rate of 30s. per 100 pounds in the following form: "This order entitles the bearer to one hundredweight of well-cleaned merchantable rice to be paid to the commissioners that receive the tax on the second Tuesday in March, 1723." Rice orders were receivable for all purposes, and counterfeiting was made felony without benefit of clergy.

Even sixty years ago there was a currency here in America which we should have found difficulty in recognizing. Under the act of February 12, 1873, the United States coined certain silver ingots known as trade dollars, and containing 420 grains of standard silver nine-tenths fine, these particulars being inscribed upon the pieces. They were made legal tender for five dollars. Notwithstanding this privilege, which conferred upon them powers that no purely ingot coins can ever command, they circulated so sluggishly that they were divested of the legal tender function by the Act of July 22, 1876, when their circulation entirely ceased. They will now only be found in the brokers' shops.

An extremely interesting form of check or token money existed in England up to the time of the grandfathers of men still living. This is the Exchequer Tally which developed into a token, a form of money, which was handed from person to person. The original idea of a tally was a stick notched for calculation. This developed into a stick notched and split through the notches, so that each party to the transaction has part of the record. Tallies are still in common use, for this purpose, in parts of the modern world, *e.g.*, among bakers in France. But in England they reached their highest development, and were not really displaced until early in the nineteenth century. The tally sticks were used in this way: When the

Exchequer received money its receipt took the form of one-half of a split tally stick, the money being paid to the holder of the half which corresponded to the half the Exchequer held. The half held by the lender was passed along as a sort of wooden money, or wooden note.

Perhaps the strangest objects which have ever become money are still to this day serving as money. These objects are (practically) immovable stones, in some cases, invisible, and perhaps imaginary. A story in connection with these stones, which is a perfectly true one, reads rather like a parody upon the gold standard as it has developed in our day.

On the island of Uap (one of the Caroline Islands), the medium of exchange is called *fei*. This currency consists of large, solid, thick stone wheels ranging in diameter from a foot to twelve feet, and in the center a hole varying in size with the diameter of the stone, so that the stones may be slung on poles and carried. They are not found on Uap itself, but are quarried in Babelthuap, some four hundred miles away to the south. Size is the most important factor, but also the *fei* must be of a certain fine, white, close-grained limestone. A traveler on Uap described the *fei* as follows:

"A feature of this stone currency, which is also an equally noteworthy tribute to Uap honesty, is that it is not necessary for its owner to reduce it to possession. After concluding a bargain which involves the price of a *fei* too large to be conveniently moved, its new owner is quite content to accept the bare acknowledgment of ownership; and without so much as a mark to indicate the exchange, the coin remains undisturbed on the former owner's premises.

"My faithful old friend Fatumak assured me that there was in a village near by a family whose wealth was unquestioned—acknowledged by every one, and yet no one, not even the family itself, had ever laid eye or hand on this wealth; it consisted of an enormous *fei*, whereof the size is known only by tradition: for the past two or three generations it had been, and at that very time it was lying at

the bottom of the sea! Many years ago an ancestor of this family, on an expedition after *fei,* secured this remarkably valuable stone, which was placed on a raft to be towed homeward. A violent storm arose and the party, to save their lives, were obliged to cut the raft adrift, and the stone sank out of sight. When they reached home, they all testified that the *fei* was of magnificent proportions and of extraordinary quality, and that it was lost through no fault of the owners. Thereupon it was universally considered in their simple faith that the mere accident of its loss overboard was too trifling to mention, and that a few hundred feet of water off shore ought not to affect its marketable value, since it was all chipped out in proper form. The purchasing power of that stone remained, therefore, as valid as if it were leaning visibly against the side of its owner's house." [18]

When the German Government purchased the Caroline Islands from Spain in 1898 there were no wheeled vehicles on Uap, and hence no roads. The paths, too, were in poor shape, and the Government ordered the natives to put them into better condition. Somehow or other the natives were quite happy with the paths as they were; the job did not get done. The Government was in a dilemma. It would be rather difficult to fine the natives and carry off the *fei* to Germany. In the first place, German shopkeepers might have been a little doubtful about exchanging their wares for *fei,* and then in the second place, it would have taken the labors of every available native to get the *fei* off the island, and the repairing of the paths would have had to wait while the natives paid up. Finally the Government hit on a sound scheme. They simply sent a man round to mark some of the most valuable stones with a cross in black paint to show the Government claim. The impoverished natives immediately fell to work, and the paths were soon in good order. Then a second man went round for the Government to remove the crosses; and there was great rejoicing on the island of Uap.

One other form of currency, used in part payment of wages in certain English coal mines in the middle of the nineteenth century,

remains to be mentioned. And that is, beer. A commission was sent to investigate its efficiency as money and reported thus: "This currency is very popular, and highly liquid, but is issued to excess and is difficult to store."

CHAPTER V

MONEY IN GREECE AND ROME

The democratization of money by the Greeks. The Greek writer's views on money. Greek wisdom in the management of money. Some of the reasons why the Greeks did not fall into the errors of their successors. How money "got out of hand" in Rome. Debasements and other inflationary dodges. "Plated" money. Was there a "managed currency" in the modern sense in the ancient world? Factors in the bad administration of monetary affairs in Rome: contempt for commerce and a bad system of numerals. Characteristics which developed with money in Rome and their part in the fall of the Empire.

CHAPTER V

MONEY IN GREECE AND ROME

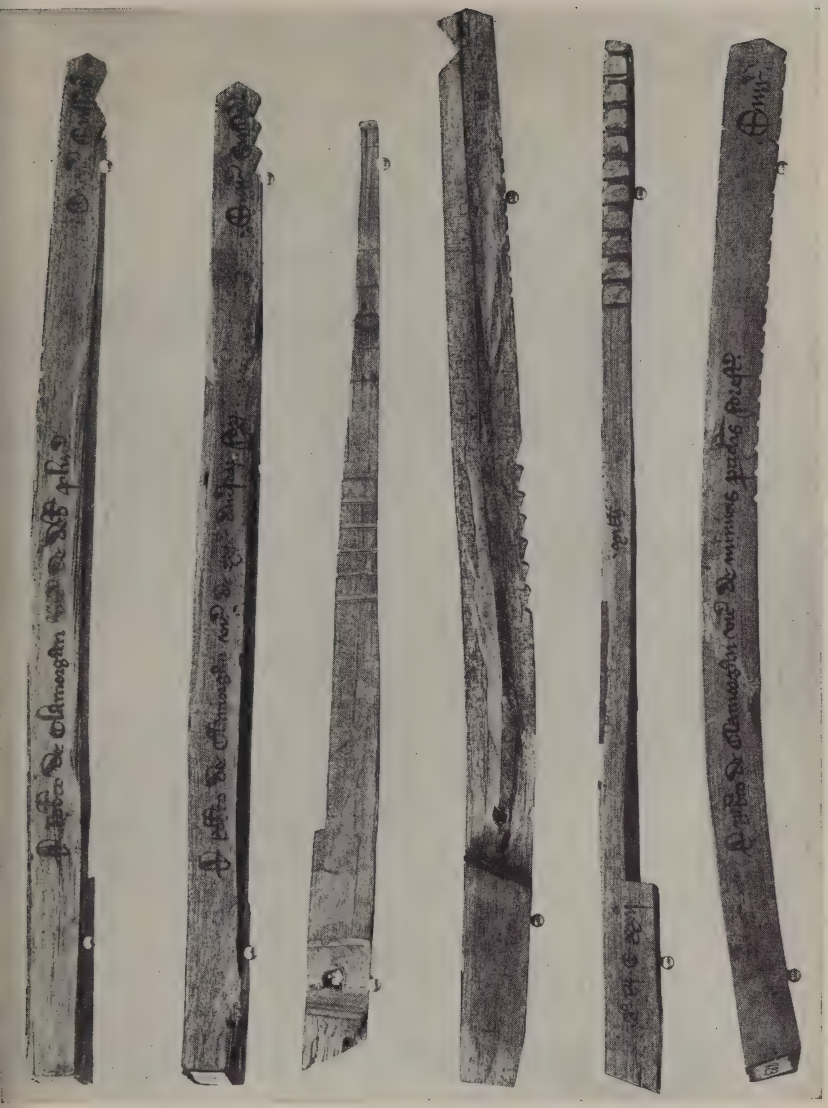
It is fitting that the Greeks, to whom more than to any other people the western world owes its democracy, were the first fully to democratize money (or, perhaps, be democratized by it); to make its use common with the ordinary man, and to impose upon it public control for the public benefit. The Egyptians and Cretans, who had preceded them in that elaboration of life which we call civilization, had known money in the form of a designated weight of metal used as a medium of exchange, but its use, as we saw in a previous chapter, was necessarily confined to a limited class, an oligarchy, and a very limited order of transactions.

So long as the medium of exchange was a given quantity of some commodity, even though that commodity took the form of ingots of metal with a seal certifying their weight and genuineness, money had not yet become a thing that entered every man's life and every man's pocket. It had neither the social power nor the social dangers which it acquired when it took the form of a coined currency. "Coins changed the nature of wealth, which, more clearly separable now from divine right, was to be as powerful as ever. More than any other one thing, coinage destroyed the old aristocracies."[1] Metal as a commodity was not subject to the easy inflation, to the misunderstandings which arose when the coinage appeared and became complicated with the magic of symbols. We shall miss the essence of the money difficulty if we fail to realize the gulf which separates a weighed quantity of some valued material used for purposes of exchange, from a coinage which, though it be made of that material, becomes also numbers, symbols carrying the insignia of authority, tokens of something else, measures.

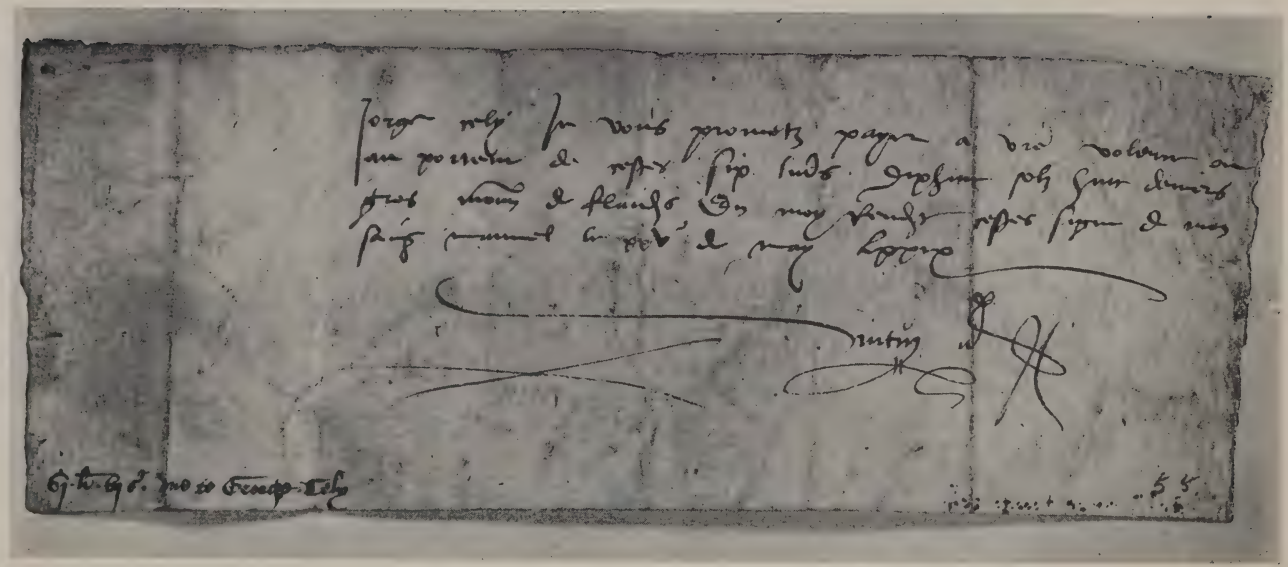
Yet this distinction between money at the stage of being merely ingots of metal even though they be stamped with a seal to indicate weight and purity, and money when it took the form of coins which pass hourly from hand to hand, is seldom made. When money is plainly a commodity, like ingots of silver or gold, we know that we do not increase the wealth they constitute by taking ingots of iron, or bricks of clay, and giving them the same stamp. Plainly that stamp does not make the iron ingot worth as much as the silver ingot. But in the year A.D. 1896 millions of Americans believed that by taking a piece of silver worth fifty cents and putting a certain seal upon it, it became worth a hundred cents, and that the process would make everybody vastly richer; and this confusion arose out of the use of coined money, and the spectacle of what it hourly accomplished. Such confusions do not arise when money consists in commodities, great slabs of recognizable metal, kept in merchants' cellars.

In other words, the problems and temptations of inflation and debasements, the discussions of the nature of credit, do not arise when the use of money has only reached the form which it had reached in Egypt. Egypt had no currency problems because, though it had money of a kind, it had not coinage.

But the Greeks learned coinage (though they were not probably the first to learn it), and it did for them in fairly full measure what money thus developed does for people: it gave, as Herodotus has pointed out, freedom of movement and leisure to a number of people who could not otherwise have enjoyed these privileges. "That," says H. G. Wells, "is the peculiar value of money to mankind. Instead of a worker or helper being paid in kind and in such a way that he is tied as much in his enjoyment as in his labor, money leaves him free to do as he pleases amidst a wide choice of purchasable aids, eases, and indulgences. He may eat his money or drink it or give it to a temple or spend it in learning something or save it against some foreseen occasion. That is the good of money, the freedom of its universal convertibility." [2]



These Exchequer tally-stocks c. 1300 show a medieval method of receipt. When money was paid into the Exchequer, a hazel stick was prepared on which notches were cut to indicate the sum so paid; other details were written on two sides of the stick, which was then split lengthwise through the notches. The pieces here shown were retained in the Exchequer; the second halves, or "foils," were given to the person paying in the money, and could then circulate, claims being evidenced by the coincidence of the two halves.



A sixteenth century I.O.U. which reads as follows: *George Cely. I promise to pay at your wish, or to the bearer of these presents, six pounds eighteen shillings and eight pence good money of Flanders. This note to be returned to me. Given under my sign manual May 25, 1579.*

But with those freedoms go certain grave dangers, which Rome vas to know in full measure, but which Greece for the most part scaped.

The fact of the first appearance of coins in Greece has been related in the previous chapter. Up to the sixth century B.C. no gold vas coined in the Greek cities. They adhered to silver. Uncoined gold may have been used by weight for the settlement of large bargains or external trade, but silver was the money of everyday life.

The source of this silver was the mines of Laurium, which were he property of the government. The silver was often stored in the emples, and the coinage of money was under the supervision of the priests. Greece never possessed more than this one great source of coin metals, the silver mines at Laurium. As these mines were monopolized by Athens, the other Greek states, Del Mar thinks, must have been driven to employ fiat money, what he calls 'numeraries."

The Athenian use of silver as the standard substance, coupled with he later employment of gold to serve for an extra or commercial currency with an unusual freedom from debasement are the characteristic features of the monetary history of Athens. The alteration of the standard by Solon appears in the light of an exceptional revolutionary expedient.* Only one doubtful instance of debasement can be found in the subsequent history of Athens. Some despots, as Dionysius, issued adulterated coins, but these were isolated cases.

We early find the Greek cities, as we should expect, departing sharply from the monetary practice of their Asiatic neighbors. While

* "It is a mistake to suppose that the occasional issue of gold coins by Greek cities is indicative of peaceful and prosperous times. The contrary is the case. All the evidence goes to suggest that in Greece proper and the West, silver was long regarded as sufficient for all ordinary commercial purposes in quiet times, and, moreover, that even silver money was chiefly in demand, or that, at any rate, the larger denominations were mostly used on occasions such as the frequently occurring agonistic festivals. Gold money, on the other hand, was only struck exceptionally, and in order to meet the extraordinary cost of maintaining or contributing to the support of an army or fleet in war time. The sporadic issue of gold coins at Athens may be cited in support of this opinion." (Head, Hist. Num., 60).

in Asia, monarchical government being the rule, kings controlled the currency, quickly supplanting the private coinage of the metals, the Greeks, organized into small city states, preserved in their own hands the right to issue money as they thought necessary. It is true that some numismatists believe that we have coins issued in Athens in the seventh century B.C. that carry the armorial bearings of ruling families, but the evidence seems doubtful. What is certain is that religious influence affected the first currencies. In early times the temples had been responsible for issuing money. This may have come about in several ways. As soon as coinage appeared it was extremely important, of course, to insure that the hallmark of genuineness was not lightly given, and would be one likely to impress the people and cause acceptance of this new thing. Further, metallic reserves in the shape of bars of metal against the need of war time or other catastrophe were kept in the temples, possibly with the feeling that by placing these reserves under the protection of the gods, sacrilege would be added to the crime of theft.

Silver from the temple hoards, Mr. A. R. Burns tells us,[3] was put into circulation to facilitate trade as notes are now withdrawn from the banks. Thus it may have been in these assemblies that the need for coins first made itself felt in Greece, and that this need, in the presence of the ability of the temples to satisfy it, produced some of the first coins and resulted in the religious types characteristic of Greek coins. In later years, when the issue of money had passed almost everywhere into political control, coins still issued intermittently from temples. "The gold issued in Athens in 406-5 B.C. was possibly struck in the Parthenon. During the fourth century temple issues were made in Arcadia at Delphi, and in the temple of the Didymean Apollo near Miletus. The latter issue bore the inscription, "Sacred money of Didyma," but the use of the usual Milesian coin type suggests that they were issued under the authority of the city. Although it might at first appear that the spiritual and temporal powers sometimes shared the prerogative of coining, in fact the Greek world never knew this distinction. The state and temple

authorities were generally inter-related in the closest and most ancient bonds, and it is most likely that all these later temple issues were made under civic authority." [4]

The early history of the various units and standards (of a round score of independent states or cities) and the influence and the interaction of Asiatic, Egyptian and Greek standards and monetary methods is obscure as well as exceedingly complex and difficult. The history of coins and monetary standards and measures of this time is a study in itself possessing a vast literature, the details of which do not have a very direct bearing upon the problems of our times. The outstanding fact is the monetary rectitude, on the whole, of the Greeks; their freedom, that is, from the debasements and dodges which mark all other currency history after the adoption of coinage (particularly the Roman), and the fact that the Greek philosophers, notably Aristotle, reveal an understanding of certain basic facts touching the nature of money which are still unrealized perhaps by the mass of men to this day.

Possibly one fact at the earlier stages of coinage in Greece may have helped this clarity of thought. We have seen in an earlier chapter how easily the early Greeks seemed to slip into the measurement of money by commodities. A given weight of metal was worth an ox, came to be called an ox, and served as a unit of measurement. Was this principle extended, and other commodity units used for the measurement of several different monetary metals? Was the relation between the measure, the coin, and the thing measured, the ox or turtle or basket of fish, kept alive in the Greek mind by the form which their currency finally took?

These discussions have not now a very actual interest. Their importance lies in their bearing on the question whether this early and close relation between goods and money clarified in some measure for later Greek thinkers the understanding of this new thing, and helped them to avoid some of the pitfalls which mark the monetary history of other states.

Certain it is that some of the Athenian writers wrote more under-

standingly on the subject than any man until, perhaps, Adam Smi
Aristotle seems to have held clearly to the distinction between mor
and wealth, which it is so difficult for the ordinary man to maint
once he has become accustomed to the use of money and to seei
that it can usually be exchanged for wealth. Aristotle notes the
istence in his time of a theory that it is a matter of comparative inc
ference what material is used for money. Plato's reference to mor
as a "symbol or token" [5] seems to indicate that he is in sympathy w
this view; and this conclusion is strengthened by his proposal, in t
"Laws," that for a domestic trade a token-money established by l
should be used, gold and silver being restricted to transactions wi
foreigners.[6]

Aristophanes, writing not long before 405 B.C., although
theorist, came very near to Gresham's law in the vulgar form, wh
he remarked with reference to the recent issues of emergency mon
in Athens: "In our Republic bad citizens are preferred to good, ju
as bad money circulates while good money disappears." The evol
tion of money, the functions of money, the influence of money
mankind, the qualities of the money material, and the value
money, were all discussed by Greek thinkers, and many of the
especially Aristotle, made a real beginning, working out analys
which later thinkers had only to develop.

Money's service as a medium of exchange and measure of valu
was clearly recognized, the latter function being stressed by Aristotl
He also referred to the use of money as a store of value. "Money w
believed to have had, on the whole, a bad influence on mankin
though it facilitates association, and hence, life in society. It w
seen that exchange rests on the existence of mutual wants and th
money enables traders to avoid the inconveniences which result fro
the dissimilarity of wants and the difficulty of transporting som
wares. Some writers held that money might be made of an
material; but Aristotle advocated the use of materials valuable f
other uses, and implied that stability of value was desirable. He al
opposed the view that the value of money is arbitrarily fixed, an

nsidered it subject to the same laws as the value of other things." [7]

Did this relative clarity of thought enable the Greeks at any time maintain what we have come in modern times to call a "managed" rrency, to stabilize the purchasing power of money by regulating s quantity? Of the host of writers who have dealt with the onetary history of the ancient world one at least, Del Mar, swers emphatically "Yes." Others are mainly non-committal in- ining to say "No."

Del Mar's case for his view that the Greeks had a scientific cur- ncy deliberately designed to stabilize prices is interesting, and must e read with the fact in mind that he has a theory to maintain, and ay well see the facts in the light of that theory. "Scientific" money egan, he thinks, with Sparta, where the difficulty of obtaining fficient and regular supplies of the metals for coinage, or else the esire to emancipate his country from the trammels of a metallic asis of valuation, induced Lycurgus, about the ninth century B.C., to sert a clause in that constitution, whose establishment "marked the se and pinnacle of social progress, providing for a system of nu- erical money, the concrete symbols of which consisted of a limited nd specified number of iron discs. These, while red hot, were ipped in vinegar, to render them unmalleable and useless for any ther purpose than money." [8]

In order to prevent the limits of this system from being exceeded, ne production and importation of gold and silver and their use as oney were absolutely forbidden. Such of these metals as the partans happened to capture in war or came by in other ways, they eposited with the Arcadians for safe-keeping. "The danger attend- ng all public accumulations of the precious metals is exemplified by vhat occurred in this instance; for, says Athenaeus, the Arcadians vere no sooner entrusted with this treasure, than they picked a quarrel with the Lacedaemonians, with the express view of seizing pon it as part of the spoils of war." [9] It must not be supposed that he iron discs of Lycurgus passed merely for their value as iron metal, lse there would have been no good reason for excluding gold and

silver adjuncts from his monetary system, nor any reason whatever for immersing the discs in vinegar to render them useless in the arts. The discs were doubtless highly overvalued, so that each one was capable of purchasing many times its own weight in ingot iron. To maintain this overvaluation, it was necessary to limit the whole number of discs at issue.

"To the refined mind of the ancient Greek," says Del Mar, "it was not difficult to understand and put in practice such a system of money, and we shall find this system imitated in many of the Greek states and colonies. There is every reason to believe that the monetary system of Lycurgus maintained its ground for upwards of three and a half centuries, and in fact that it remained in vogue so long as Sparta continued to be a progressive state, and fell into disuse only when, after having long held the hegemony of Greece, the Lacedaemonians were compelled to relinquish it to Athens B.C. 479." [10]

Del Mar touches on certain criticisms of his account of Spartan monetary history. "To the honest Plutarch, who appeared nine or ten centuries later, and who could see nothing more in a monetary system than an uncertain and unknown number of ounces of metal to be exchanged as commodities for other commodities, the numerary system of Lycurgus was entirely incomprehensible and, in order to deride it most effectively, he invented the silly story that it required a cart and a team of oxen to transport the most ordinary sum of the Spartan money. Like many another false thing, this story has passed current for nearly twenty centuries, perhaps for the reason that it has not been worth anybody's while to contradict it." [11]

Mr. A. R. Burns evidently cannot agree with Del Mar's view, although he does not mention this latter authority. There is very little direct evidence, Mr. Burns thinks, of the extent to which, in ancient times, the state attempted to force the acceptance of its currency by making it a legal tender. Specimens of coins give no assistance, and literary records rarely regard it as worthy of mention. Xenophon says [12] that "in most cities (other than Athens) the trade

is under the necessity of loading his vessel with some merchandise or other in exchange for his cargo, since the current coin has no circulation beyond the frontier." But whether its circulation within the country is enforced by law is not stated. Bartering for gold was probably a common procedure. Aristophanes, in his reference to the decrying of the bronze coin at Athens, implies that it had previously enjoyed some legal support. Indeed, all issues of plated and debased coins must have been accompanied by legal provisions to secure as free a circulation as possible. "It is beyond doubt that legal tender regulations existed in some form or other from the earliest times. No unit of account could come into general use until it was legally defined, and this would involve a statement of the means by which a debt expressed in the unit could be settled." Yet Mr. Burns thinks there is no evidence that any of the silver issues of the Greek cities were ever managed with a view to maintaining them above their bullion value. Token issues must be sought, therefore, among the bronze coins, and as the cities of Asia Minor, the islands, continental Greece, and Magna Graecia confined their issues to gold, silver, and electrum, until the last two decades of the fifth century B.C., no tokens are found before then. "Tokens first appeared in Sicily, and probably in Syracuse, as an emergency issue at the time of the Athenian invasion. The first issue was made in Athens in 406 B.C., there also in a period of extreme financial strain when the ornaments from the temple had already been melted down and sold. The types on the coins resembled exactly those on the contemporary silver coins, and the pieces were probably plated. They were intended to replace the silver issues, and pass at the same value. The former they did, for Aristophanes complained that good money was used to pay debts abroad, while at home only bad copper pieces carrying the crudest imprint had to suffice. This would not have greatly mattered if the supply of the new pieces had been sufficiently restricted, but it appears that it was not, for in 394 B.C. the copper was hurriedly declared no longer legal tender, and silver alone was to be receivable in commerce and at the Treasury." [13]

What seems certain with reference to the Greeks' experience with money is that they did not misuse it as almost every state has misused it by debasements and other forms of inflation.

It is extremely doubtful, however, whether any ancient community understood the nature of this new tool of money sufficiently to work successfully a "managed" currency; or would have had adequate social control and a banking system sufficiently developed to have accomplished the thing even if they had understood it. For the fact that the Greeks pursued on the whole a "sound money" policy as compared with their neighbors, and later the Romans, Mr. Burns gives a number of explanations which are summarized thus:

> Communities were small, and required no great quantity of currency for internal trade; in many places the mint worked only at long intervals. The smaller the quantity of currency, the less the profit to be obtained by reducing its weight. While the profits of recoinage might be small, the device would, however, be as useful as ever as a means of reducing the burden of debts, where the unit of currency was also the unit of account. But the smallness of communities gave rise also to positive arguments against interference. The smaller the society, the greater is the proportion of its trade that is likely to be "foreign," and the more important is it to avoid action likely to hamper such trade. Any state reducing its standard out of harmony with others would feel some reaction upon its relations with neighboring towns. Coins might be so reduced as to retain a simple relation with the principal foreign units, but such alterations were probably unpopular. The form of political organization, consequent on the smallness of communities, constituted a further important fact, for reductions aimed simply at profit are unlikely to gain acceptance in a democratically governed state. In a small democracy such as that of Athens which gave all citizens a share in the public business, the pressure of those likely to suffer by alterations could be brought more easily and directly to bear upon the authorities to discourage such a policy. The democratic Republic was, therefore, less likely to be afflicted with monetary depreciation. In the Middle Ages Venice and Florence were most fortunate in this.[14]

Mr. Burns does not seem very hopeful that this will operate with modern democracies and representative government. The problem is less simple in our time. "Money has become in modern western

communities the pivot about which social and economic mechanism revolves. In consequence, people tend to regard it as fixed and to be much more easily gulled by currency manipulation than ancient peoples who continued to barter (especially for the precious metals by weight), long after money was introduced. The use of paper money, and the existence of a complex banking system, confuse the question, and the average citizen is not always quite sure that depreciation of the currency is wholly bad; even if he is, he is still not sure of the causes of the rise in prices and of the best method of tackling them." [15]

The existence of the two systems—barter and money—side by side, quickly revealed attempts to depreciate money and their consequences. Even so

> Athens was forced to debase its coins during the Peloponnesian War. The democratic states which inflated their currencies during and after the War of 1914-18 did so under the stress of war and its consequences, the burden of which was, proportionately to their resources comparable to the burden which the Peloponnesian War threw on Athens. Their response was much the same as in Athens, with the exception that new monetary devices were employed, but with similar consequences. Depreciation in early times presupposes "sovereign power vested in the hands of a monarch possessed of unlimited authority who has a direct personal interest in the profit to be made from the degradation of the coinage, and who has power sufficient to enable him to force his debased currency on a reluctant people," or it should be added, as an alternative, a disaster great enough to secure general acceptance of depreciated money. The rarity of such a concentration of power in Greek cities accounts for the maintenance of standards except in times of disaster.[16]

It is interesting to note that the states of Greece provide us with the first example of the conscious internationalization of money. Each state had the right of coinage but in the fourth century B.C. the city states were determined to exercise their prerogative to demonstrate the recovery of autonomy. Realizing that economic conditions demanded some agreement between them, they united to exercise their coinage rights. "Monetary unions had been known

a century earlier, but now became common. The reason for the desire to issue common currency lay sometimes in the need for military coöperation, sometimes in the recognition of the advantages of free economic intercourse, and to a minor degree in the greater efficiency and economy of minting carried on upon a larger scale than any city except one possessing ample supplies of metal could afford."[17] Although the Greek states only occasionally, and then only under dire stress, resorted to direct debasement, Athens, like practically all the states until the nineteenth century, was confronted by problems of bimetalism or multimetalism. Aristophanes in "The Frogs" and other plays makes it plain that both gold and silver were in times of debasement either hoarded or exported and the brass coins of his time formed the mass of the circulating medium.

The truth is that the whole history of the monetary troubles of the ancient world reveal that no state was for long able to grapple with the problems involved in a multiple standard—the problem of valuing a currency in one metal in terms of another so as to keep the two in circulation and prevent a drainage abroad or into private hoards of one or the other. The mechanism of Gresham's Law—the fact that bad coin tends to drive the good out of circulation because people keep the good and pass on the bad—seems nowhere to have been fully grasped or acted upon. With a multiple standard problems of foreign exchange would be enormously difficult to handle even in our day of a developed banking system with its co-ordinated action in some measure over the whole world. In the ancient world it became, as we know, at times insuperable.

All the difficulties revealed in a nascent form in the Greek cities, spring into prominence when we come to the monetary period of Roman civilization.

When we come to Rome, especially at the time of the first two centuries after Christ, we seem to enter a familiar atmosphere.

An American essayist[18] of our day remarks of this Roman period

that "The substance is surprisingly familiar." The elements are thus enumerated. "Rampant materialism; the ease and frequency of travel to all parts of the known earth; the passion for speed; the juxtaposition of great wealth and great poverty; the breaking down of old social barriers and rise of a rich parvenu class; the immense importance of money; curiosity; tolerance; fear of the mob; disillusionment; syncretism; the strong influence of rhetors and sophists and demagogues; emancipation of women; Greece playing the part, among the upper classes, that Europe has played with us in matters of culture, and taste; a tremendous influx of foreigners, so that not only Rome but other Italian cities (especially ports) must have been melting-pots like New York's—among these facts and conditions the twentieth-century American finds himself astonishingly and woefully at home. The Roman republic had vanished as completely as the American republic has vanished. There were the same powerless aristocratic laments; the farmers complained and the profiteers flourished; the rich bought for themselves new sensations which the poor clamored to have popularized—and disillusioned men and women of fashion sought spiritual comfort from Oriental peddlers, being weary of the faith of their fathers."

"What has happened to Rome?" A variety of answers are given —a decline in religion, a decline from the virtues of the Roman forefathers, Greek intellectual poison, and the like. But as H. G. Wells[19] points out, "we who can look at the problem with a large perspective, can see that what had happened to Rome was 'money'" —the new freedoms and chances and opportunities that money opened out. "The flexibility and transferability of money was becoming a power and, like all powers in inexpert hands, a danger in human affairs." It was altering the relations of rich men to the state and to their poorer fellow citizens. "One main respect in which the Roman system was a crude anticipation of our own, and different from any preceding political system was that it was a cash and credit-using system. Money had been in the world as yet for only a few centuries. But its use had been growing; it was providing

a fluid medium for trade and enterprise, and changing economic conditions profoundly. In republican Rome, the financier and the 'money' interest began to play a part recognizably similar to their rôles to-day."

But the very familiarity of the conditions of the ancient world in this respect may be a trap, in the sense that we may turn Romans into Americans or Englishmen, and have them think with the minds of Wall Street bankers, when perhaps they did not think, because they could not think, as moderns do.

In certain textbooks of Greek history you may find the picture of a Greek steam engine, worked upon a principle which is that of the most modern type. The Greek engine, which dates from several centuries B.C., is a toy, it is true, but it reveals most strikingly the basic principle of the modern engine—the use of steam produced by heating water for the purpose of furnishing mechanical power. Here was the principle, and it was brought again and again to the attention of scholars in one form or another. Yet two thousand years were to pass and civilizations were to crumble, before the principle embodied in that toy was to be used, and, because used, to alter profoundly man's whole relation to the universe, and to place in his hands the power of giants.

This picture of the Greek steam engine, proclaiming a secret to which no one was to listen for twenty centuries, comes to one in reading the story of money and its effect upon the rise and fall of civilizations.

In the story of this tool of money and credit, which man is just now beginning to shape consciously to his ends in a systematic and scientific fashion, one may discover in these ancient records all the elements, all the principles being tentatively, blunderingly applied.

There is not a device known to modern banking and monetary science, the general idea of which one cannot find revealed somewhere in the ancient world. But so often apparently the idea was born but to live precariously a little while and then die. Other

factors were not ready—printing, intercommunication, a better system of computation (Roman numerals were hopeless as a medium for expert accountancy). Men seemed to catch a glimpse of scientific ideas about money and then slip into gross fallacy. Rulers and philosophers in the ancient world, as in the world of the Renaissance, wrestled in their minds with nearly all the problems that confront the world's bankers to-day. They saw, at least dimly, the dangers of inflation and of deflation, the need for elasticity, the advantages of credit, the fact that money should be "managed" in the general interest, the distinction between money and wealth. Yet it is true to say that one of the causes of Rome's fall was the inefficiency of her monetary system, and that for a thousand years the policy of European states was vitiated by the crudest and silliest fallacies concerning the nature of money.

"Money floated the Romans off the firm ground," as Wells puts it. Every one was getting hold of money, the majority by the simple expedient of running into debt; the eastward expansion of the empire was very largely a hunt for treasure in strong rooms and temples to keep pace with the hunger of the new need. The Equestrian order, in particular, became the money power. Every one was developing property. Farmers were giving up corn and cattle, borrowing money, buying slaves, and starting the more intensive cultivation of oil and wine. "Money was young in human experience and wild, nobody had it under control. It fluctuated greatly. It was now abundant and now scarce. Men made sly and crude schemes to corner it, to hoard it, to send up prices by releasing hoarded metals. A small body of very shrewd men was growing immensely rich. Many patricians were growing poor and irritated and unscrupulous. Among the middle sort of peoples there was much hope, much adventure, and much more disappointment. The growing mass of the expropriated was permeated by that vague, baffled, and hopeless sense of being inexplicably bested, which is the preparatory condition for all great revolutionary movements." [20]

The first metal money of Rome was copper, the "as" which Pro-

fessor Ridgeway describes as a copper rod one Roman foot long and half a Roman inch in diameter. "No doubt from time out of mind one hundred of the bars of copper, which formed the chief lower unit of barter, made one cow." Beginning with copper, the currency was changed into a double standard one by the introduction of silver at about 269 B.C.. Gold came in for commercial use with the extension of the Roman dominions, and copper was reduced to a token coinage. In the stress of the Punic Wars debasement was one of the financial devices of the magistrates. The conquest of the Greek territories brought about the regulation of their currencies, and silver was prescribed as the money substance. The establishment of the empire led to the definite concentration of the right of coining in the sovereign; though concessions were made in various localities, where the smaller coinages were allowed to continue. Certain phrases become exceedingly familiar as one glances through the pages of the monetary historians of Rome. "A long course of debasement is the characteristic aspect of the currency system," writes one. "Under the empire," we are told, "the history of the silver coinage is one of melancholy debasement. The most extensive frauds in connection with money were perpetrated by the Romans." The gold *aureus,* which in the time of Augustine was one forty-fifth of a pound, was under Constantine only one seventy-second of a pound. The alloy in the silver coins gradually rose to three-fourths of the weight. Plated coins came into extensive use. "The practice of debasement was in accordance with the theories of the jurists, who seem to have regarded money as simply the creature of the state, *i.e.,* the personal ruler."

How far does this latter fact—that jurists regarded money, not as something dependent for its value upon the value of the material of which it was composed, but upon legal enactment—give ground for Del Mar's view that the Romans had sufficient understanding of the quantity theory of money and sufficient social and political capacity to maintain a legal tender system, what we should call a "managed currency"?

In the reading of the facts one vital distinction should be kept in mind. The ancients may well have taken the view—indeed certainly did—that prices could be controlled by legal enactment, and in this sense were always legislating about the value of money. But did they achieve the conception that the only way to control the value of a fiat or legal tender currency was to control its quantity? Del Mar assumes they did, though he admits the facts are difficult to arrive at.[21] "Among these various systems of numerary money," he says, "that one of which we possess the most accurate details was the Roman. It was established about the year B.C. 385, remained intact for more than a century, and lasted in a modified form until about the year B.C. 217. At one period the symbols appear to have been over-valued about five times; at another, about six and a half times. But the data from which these particular inferences are derived may be misleading; and it is quite possible that the over-valuation may have been the same at all times."

His review of the sheer facts is that common to most historians of the subject, and may be summarized:

1. Before the time of King Servius Tullius, who reigned B.C. 578-534, the money of Rome consisted of crude copper metal in bars or ingots. Servius was the first to make an "impress" upon this metal. The fraction of the monetary system he established was the *as,* which weighed exactly one Roman libra or pound and hence went also by this name as well as the other.

2. For three hundred years, during which period most of the surrounding nations employed gold and silver coins for money, Rome continued to use copper coins of the weight mentioned above, and at their value as copper, although at that time, so far as we can now determine, that metal bore no higher weight relation to silver metal than it does now. At the scale of prices then current this money must have been exceedingly heavy and cumbersome.

3. About the year B.C. 269, silver was first coined in Rome; the first silver coins were called denarii, weighing each one-sixth of a Roman *uncia* or ounce, and ordered to pass current with the *ases*

at the rate of ten *ases* for one denarius, which made a weight relation of about seven hundred and twenty to one.[22]

4. In B.C. 250, the *as* was degraded to one-sixth of a pound, the weight of the denarius and its tale relation to the *as* remaining unchanged, the weight relation became changed to about a hundred and twenty to one.

5. In B.C. 216, the *as* was degraded to one-twelfth of a pound, the denarius to one-seventh of an ounce, and the latter ordered to pass for sixteen of the former. This changed the weight relation to about a hundred and twelve to one.

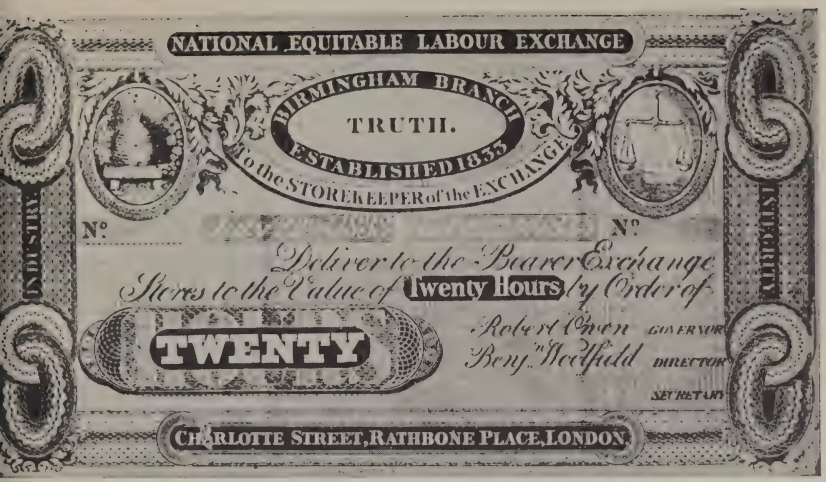
6. In B.C. 207, a gold piece was coined called a *scripulum* or scruple, weighing 18.22916⅔ grains, and valued at twenty sestercii or five denarii, which made a weight relation of 17.2 of silver in the denarius to one of gold in the scruple.[23]

7. By the Lex Papirius about B.C. 130, the *as* was degraded to one twenty-fourth of a pound or half an ounce. The weight of the denarius and its tale relation to the *as* remaining unchanged, this would make the weight relation of copper to silver about fifty-six for one.

8. In the time of Julius Cæsar the gold aureus was coined at the rate of forty to the pound and its legal value fixed at twenty-five silver denarii.[24]

Del Mar draws certain conclusions from these facts which the reader need by no means draw, but the above seems a fair summary of accepted views as to the main monetary events in the period under review.

It was about 268 B.C. that silver was first coined in Rome, and about that time, the first reduction of the *as* took place. The amount of this reduction, its causes, and its consequences, are all still, more or less, in controversy. Mommsen regards the two events, the issue of silver and the reduction of the *as* as part of the same operation and does not look upon the latter as anything in the nature of an act of bankruptcy. "What is certain," says Carlile, in his "Evolution of Modern Money,"[25] "is that, before 268 B.C., the word *as* was the

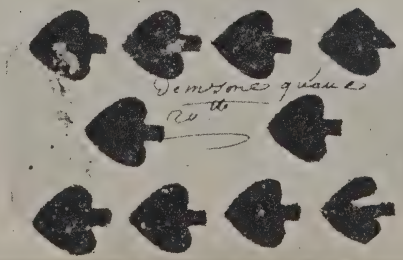


Robert Owen Labour Note for Twenty Hours.

Duplessis
Pour la somme de
Cinq cents Livres.
Vaudreuil 1714. Begon.

2

Duplessis
Pour la somme de
Cinquante Livres
1714.
Vaudreuil Begon



17 14.
Duplessis
Pour la somme de quarante
Livres
Vaudreuil Begon

ıame first for a copper ingot, and then for a copper coin a little ınder one pound in weight, and the equivalent of one pound of aw copper in value, which was the universal unit of account in all omputations; and that, after 208 B.C. it was made the name of a oin of, at first, four ounces, and, afterwards, much less in weight." n such circumstances it was, perhaps, natural to suppose, as Pliny loes, that even the first reduction was made with the view of paying off national creditors with the equivalent of thirty cents on the lollar. Yet while the old *as libralis* ceased to exist as coined noney, it remained in continual use as money of account. The *as libralis* came into being again, in silver, under the name of the esterius or nummus. The diobol of Tarentum, weighing about a cruple of silver, had apparently in the course of commercial trans-ıctions, equated itself in value with the pound of copper. Accord-ngly a coin weighing a scruple was issued in Rome, and was called ıummus, on account of its equivalence with the old standard, the *as libralis*. For the moment the money of Rome was bimetallic. Every transition of the standard, indeed, as we have seen, implies ıecessarily a bimetallic period of shorter or longer duration. "Thus," ays Mommsen, "fines for injuries which the law of the Twelve Tables fixed at 25, 150, or 300 *ases,* were payable in so many ses-erces," precisely, indeed, as fines by the old English law in so many ounds sterling of silver are payable now in so many sovereigns. 'What is certain," he observes, "is that the *as libralis* was retained ıs money of account, and that it survived, long after its suppression, n the sesterce, or nummus of silver, which had the same value; only n keeping accounts care was taken to add the words *aeris gravis* o distinguish the old *as* from the new. Indeed there was no differ-:nce between the silver nummus, weighing two and a half new *ses* of four ounces each, and the old *as* which weighed ten ounces." [26]

The undisputed reign of silver as the standard money in Rome vas of short duration. The period of bimetallism that rendered pos-ible the transition from copper to silver had hardly ended before

a second period of bimetallism began, which prepared the way fo the second transition, that from silver to gold.

The underlying cause that had led the Roman state to issue silve seems to be found in the fact that silver had already become th money of its wholesale trade. The denarius was modeled on th drachma, the great unit of account in the Hellenic world. It wa in denarii and drachmas, or in some other form of silver, that wha we would now call the international balances were settled. The *ase* therefore, so long as they were exchangeable in fixed proportion fo denarii, served perfectly well the purpose of the internal circulatio no matter what their weight happened to be. "With the ancients, comments Carlile,[27] "all the monetary metals were *ipsae opes,* an the reduction in the weight of one sort of money no doubt seeme to them very much the same kind of operation as the reduction i the weight of any other. We thus find that the same confusion c thought which has generated free silverism in the United State appears to have generated a movement of a closely similar characte in ancient Rome."

Ultimately we find the silver money following the same cours which, in the earlier period, had been followed by the copper. U to the time of Nero the denarius was found to contain 99% of pu silver. A process of depreciation then began. The denarii of th latter part of this reign contain from 5 to 10% of alloy. Und Trajan and the Antonines—the golden age, it must be remembere of the Empire—the proportion of alloy rises markedly to somethin between 20 and 25%.

Under Severus, again, the silver becomes mere billon money, co sisting, to the extent of at least one half, of copper. The real reas of this depreciation is again, no doubt, to be found in the fact th gold had now definitely taken its position as the principal measu of values, and that, consequently, the intrinsic value of the silv coinage had come to be, to a great extent, a matter of indifference the general public, so long as it continued to be exchangeable f gold in fixed proportions. The depreciation, at any rate, was co

sistent with a high degree of national prosperity. It caused no tumult, and, apparently, attracted very little notice.[28]

The immunity, however, from the danger involved in such a depreciation, did not endure very long. Carlile adds: "If the state could issue billon that circulated at the gold price of silver, while the principle of limitation so familiar to us now had hardly even begun to be dimly recognized, the emperors of the second century were perhaps hardly to be blamed if they began to fancy that they had, in the power of issue, a Fortunatus's purse without bottom. It is not a matter of surprise, at any rate, that the depreciation of the denarius, which under the Antonines was, or at any rate seems to have been, innocuous, led up, when accompanied with unlimited issues by Caracalla and his successors, to the great crisis of the third century, which was one of the main factors in producing the political anarchy that prevailed in the Empire for more than a generation." [29]

There began to be revealed early in Roman monetary history—in the history of the republic that is—what all history has since revealed, that the great occasion of debasement and inflation is war. In the second Punic War we read that "when Hannibal had crossed the Apennines and was marching on Rome the difficulty of financing the war, and particularly of finding funds for the soldiers' pay, led to a financial crisis. The whole of the people voting *in comitia* passed the Lex Flaminia by which the *as* was halved in weight." This particular law may not have made much difference to the real position of the *as,* but it was indicative of the kind of thing that took place at nearly all such emergencies, the total result of them being that the *as* became in the general view of historians a token coin—as our copper currency is. Token coins can be extremely useful, but in a state where no paper money exists they become as they became in Rome, taken in conjunction with debasement of silver and gold, the easiest means of inflation. It is true, as Grueber points out, that the Romans were doing no more than the Greeks had done two hundred years previously. Mommsen (II, 73), says: "It is certain that the old Roman ideas of considering copper as a pre-

cious metal gave way to the Greek idea of considering it as no mor than representative of value in silver." But the Greeks, with much less complicated political problem and living within commu nities so small as to trace the effect of currency manipulation, ha known how to exercise better control. Sir John Lubbock says of th Lex Flaminia that "it recognized the new principle that the 'coi was a sign,' which unfortunate error naturally opened the door t further debasement." Lenormant (III, 23) stigmatized it as th only act during the "great age" of the Republic which constitute a real alteration of the money attempting to give to it an arbitrar and conventional value other than its bullion value. This law, h says, "remained a fatal precedent on which to base 'la doctrine de l monnaie signe,' the theory that a legislative decision sufficed to giv metallic money a fictitious and arbitrary value. The idea sprea to the aristocratic party, which became powerful in the direction o affairs, and the vicious principle that the state had the right to us its power to alter the monetary standard as an ordinary source o revenue became part of their political and financial programme Not only did they cause perturbations in the monetary system o their time, "but they introduced into the world an erroneous prin ciple, the consequences of which are even yet felt after man centuries." [30]

But much of this indictment would have to go by the board i we regard the *as* as a token coin, and the whole arrangement, par of what was in fact a legal tender system, the value of the currenc to depend upon its limitation. Such a device of representative mone thoroughly worked out might have enabled the Romans a centur or two later to economize bullion and avoid debasement of th standard metal.

It is Del Mar's view, indeed, that this is precisely what was takin place, and he proceeded to argue that the Romans for a period, lik most of the ancient peoples for a period, were maintaining a man aged currency. His view, together with certain cautions to b observed in connection with it, has already been touched upon.

"The Roman monetary system," he insists, "was a numerary one. The numismatic relics which have been so long regarded by the learned world as copper coins were essentially irredeemable notes stamped (for lack of paper) on copper, and devised and designed to pass in the exchanges for a much greater value than that of the material of which they were composed." [31]

In summary, his case is that about the period when the Gauls were expelled from Rome the Roman republic deliberately and purposely adopted what we should now call an irredeemable paper currency, only that instead of being printed upon paper, printing being then unknown, and paper flimsy, [32] it consisted of numerals stamped upon bronze, whose emission was controlled and regulated by the senate, who jealously maintained and guarded this privilege, only yielding it when the constitution was overturned and the senate itself had sunk to the condition of a mere registrar of the edicts of ephemeral tyrants.

Gold and silver coins, he explains, had previously long been in common use among all the nations surrounding Rome. Gold and silver in ample quantities were easily obtainable by the republic had it seen best to use them for coins, but these metals were bought and sold in republican Rome as commodities and stored as bullion in vaults for use in foreign wars, and shipped to India in exchange for merchandise. "They were allowed to be coined by Roman families long before they were used as money in Rome, and in choosing to adopt an irredeemable currency the Roman senate did so from a conviction that at that time gold and silver were an insecure foundation upon which to rest the industrial and social superstructure of a great state, and not because of any inability on its part to command what would, at that period, have been ample supplies of these metals." [33] So long, he goes on to argue, as the Roman numerical system was preserved intact, the state continued to increase in population and productive resources. "Long before the numerical system was abandoned it was encroached upon by silver, and afterwards also by gold, in the legal use given to these metals for the payment of troops, who

having themselves been the means of capturing large quantities
bullion from the enemy refused to receive their pay in tokens whic
had no value beyond the confines of the republic, and whose patrio
ism was thus corrupted by the spoil of battle. From the time
this introduction of silver and afterwards gold into the currency, an
perhaps partly in consequence thereof, the state began to decay, b
cause prices came to be based upon the bullion value of the precio
metals, instead of the legal value of bronze, and with this chang
prices immediately began to fall, and continued to do so for ov
ten centuries." [34]

The evidence that there was ever in Rome a direction of moneta
policy as conscious as that which Del Mar's interpretation implie
is altogether inadequate. It seems more probable that the Roma
understood the new tool upon which they had stumbled as little
the peoples of the old and new world who succeeded them; that
the matter of currency policy they lived from hand to mouth; th
they believed prices could be controlled simply by enactment irr
spective of the quantity of money; and finally, that they were t
victims of most of the fallacies about money which some who wro
their history seem to have been. Further, they were confront
with certain difficulties special to their circumstances—absence
printing, paper and an efficient system of numerals—from whi
their successors were much freer; and like nearly all the people un
our times were cursed with the special problems of bimetallism,
with those of multimetallism.

What is certain is that the inflations by means of debasements
the standard metals were frequent and persistent in all the lat
periods, and particularly from our era.

J. S. Reid in his "Reorganization of the Empire" [35] points out th
although the imperial coins underwent a certain amount of dep
ciation between the time of Augustus and that of the Severi, it w
not such as to throw out of gear the taxation and commerce of t
Empire. But with Caracalla a rapid decline set in, and by the tir
of Aurelian the disorganization had gone so far that practically go

nd silver were demonetized, and copper became the standard
nedium of exchange. The principal coin, that professed to be
lver, had come to contain no more than 5 per cent of that metal,
nd this proportion sank afterwards to 2 per cent. "What a gov-
rnment gains by making its payments in corrupted coin is always
nore than lost in the revenue which it receives," says Reid in this
onnection. "The debasement of the coinage means a lightening of
axation, and it is never possible to enhance the nominal amount
eceivable by the exchequer so as to keep pace with the depreciation.
he effect of this in the Roman Empire was greater than it would
ave been at an earlier time, since there is reason to believe that
nuch of the revenue formerly payable in kind had been transmuted
nto money. A measure of Aurelian had the effect of multiplying
y eight such taxes as were paid in coin. As the chief (professing)
ilver coin had twenty years earlier contained eight times as much
ilver as it had come to contain, he claimed that he was only enact-
ng what was justly due, but his subjects naturally cried out against
is tyranny. No greater proof of the disorganization of the whole
nancial system could be given than lies in the fact that the treas-
ry issued sack loads (*folles*) of the Antoniniani, first coined by
Caracalla, which were intended to be silver, but were now all but
ase metal only. These *folles* passed from hand to hand un-
pened." [36]

Finlay declares that the depreciation in the value of the circulating
nedium during the fifty years between the reign of Caracalla and
he death of Gallienus "annihilated a great part of the trading capital
n the Roman Empire, and rendered it impossible to carry on com-
nercial transactions, not only with foreign countries but even with
listant provinces." Every payment was liable to be greatly dimin-
shed in real value, even when nominally the same. "The state of
hings at last induced capitalists to hoard their coins of pure gold
nd silver for better days; and as these better days did not occur, all
nemory of many hoards was lost, and the buried treasures, consist-
ng of select coins, have often remained concealed until the present

time. Thus the frauds of the Roman emperors have filled th cabinets of collectors and the national museums of modern Europ with well-preserved coins." [87]

These debasements and other currency manipulations are impor tant as bearing upon the view (which will be discussed a little later) that the fall of Rome itself was due to a natural shortage of gol and silver. But how far was the shortage due to the currency polic or lack of policy followed by Rome? That it entered in there ca hardly be any doubt. There seems to have been but the faintest un derstanding of the operation of the Gresham Law—the mechanism which operates when two currencies of unequal value are in circula tion at the same time and which causes the bad to drive out the good And this certainly entered into the drain of bullion which gave ris to so much complaint towards the middle of the first century A.D Gold and silver began to flow abroad very early in the century Tiberius in the second decade complains of the feminine vanit through which, for the sake of precious stones, "our wealth (pecu niæ) is transferred to foreign and even hostile nations." Half a cen tury later in A.D. 77 Pliny estimated that at least 550 million *sesterce* (about twenty-seven million dollars) were exported annually t India alone to pay for imports. These complaints, remarks A. R Burns, may have been no more than narrow mercantilist dislik of parting with treasure, and the exports of bullion may have bee counterbalanced by imports of treasure from other directions. Bu the gold value of silver had been rising, and as the currency systen was bimetallic it is possible that before Nero reformed the currenc silver coins were exported and melted because they were under valued in coins. "But Pliny is quite definite in his reference to ex ports of gold. We have seen that before Nero's time the issue o plated coins had been revived. Nero certainly issued plated coins These pieces sank in value as their quantity was increased. So fa as the law succeeded in preventing them from being taken at a di count in good *denarii,* the tendency would be to raise prices an render both silver and gold less valuable in coins (in which forn

hey had to compete with base coin), than they were abroad or as ullion. The base pieces then drove out the good and caused the xport of treasure that gave rise to complaint. Thus the reason for he product of the West not finding a ready sale in the East, whence ame the Roman luxuries, was a high level in Rome which raised he cost price of exports and offered good prices for imports. This igh-price level was due to the inflation caused by the issues of base oins and the failure of the exchange to represent the purchasing ower parity between Roman and foreign coins." [38]

The devaluation of gold and silver was thus probably, Burns hinks, due to a short-sighted attempt to prevent the export of treas-re which, in fact, was the consequence of the adverse movement of he exchanges caused by Nero's issue of plated coins. The devalua-ion was made more attractive by the small coinage profits and not nconsiderable relief to debtors that accrued from the consequent ise in prices.

By about A.D. 270, the currency consisted almost entirely of *argen-ei Antoniniani,* containing about 2 per cent of silver. Third-cen-ury hoards contain but a very small proportion of gold.

Resort was had to the use of gold by weight as the medium of xchange as well as the basis of the unit of account. "This demoneti-zation of gold was a gesture of despair in the utility of money," com-ments Burns, "and a return to the system in vogue in Egypt and Babylon of two or three thousand years earlier." [39]

The demonetization was maintained. Mommsen says: "We know positively that in the reign of Constantine all payments in gold money were by weight, and that ingots of gold regularly controlled were accepted by weight. The government made and deposited in he principal towns standards to facilitate the verification of the gold pieces, and special employees were appointed to carry out the test at the request of individuals."

The foregoing will perhaps suffice to give a hint of the way in which Rome "muddled through" her currency problems. That those problems were intimately related to the economic and social

strains from which she suffered and which have been touched upon is certain.

Several historians take the view that a real shortage of the precious metals made a good monetary policy on a gold or silver standard impossible. Professor Cunningham summarizes the evidence thus:

"The scarcity of the precious metals in Rome, coupled with their fluctuating value . . . rendered it exceedingly difficult for any one to save wealth; they also made men unwilling to risk their accumulations in business of any kind, and to use it as capital. The complete uncertainty in regard to prices paralyzed trade, and capitalists were 'induced to hoard their coins of pure gold and silver for better days,' which never came. Industry did not offer a tempting field, as the enterprising man of business would often have to face the competition of a manufactory organized by the State and controlled by officials whom it would be imprudent to offend. There was even greater disinclination to use capital in agriculture and apply it to permanent improvements. Accumulated wealth was hoarded rather than invested, and general decay ensued; money and circulating capital are not necessary for the maintenance of human life, but they were necessary for the maintenance of a civilized society like the Roman Empire." [40]

It will be noted that Cunningham here wisely refrains from committing himself to the sweeping generalization which certain historians, notably Sir Archibald Alison, have put forward, that the fall of Roman civilization was not due to any of the social or moral causes which are so often assigned—slavery, social corruption, and so on—but to a decline in the silver and gold mines of Spain and Greece. The suggestion raises certain questions larger than that of Roman monetary policy—the relation of the plenty or scarcity of the precious metals to the maintenance of civilization in general.

The chapter which follows this discusses that larger question, and the countersuggestion is there made that a more adequate explanation would be, not so much the shortage of metal as the difficulties which the Romans experienced in managing for monetary purposes

nose they had; that the disappearance of the precious metals was ften due to their bimetallic system, and to the operation therein of ne Gresham Law; that a bimetallic system is at best extremely diffi- ult to work without one or the other of the metals disappearing ither by hoarding or export, and impossible of efficient management vhen under the control of rulers who regarded commerce with con- empt and who tended to look upon its serious study as unworthy of statesman, as indeed beneath his notice. Other factors like the ifficulty of using the Roman system of numerals in accountancy nay have entered in. Moreover, despite these difficulties, the State id not confine itself to managing the currency but undertook at imes, as part of its type of Imperialism, the management of import nd export of foodstuffs, so that although commerce was held in ontempt by those who ran the State, the State was often merchant nd *entrepreneur*. Plainly, in these circumstances, the economic ask which it undertook was larger than it was competent to handle.

The relation of the quantity of the metallic moneys to the rise nd fall of civilization is the larger aspect of the question, and is lealt with in the next chapter; but the facts which bear upon the narrower question of Roman fitness for coping with the vast eco- nomic problems which it faced, belong more properly to this hapter, to the story of Roman experience with money and its management.

Let us get some notion of the dimensions of the problems they faced. First the purely monetary one of bimetallism. The ratio between the metals was an everlasting difficulty alike with the ancient, medieval, and the Renaissance world. Thinkers of the caliber of Locke sometimes flounder hopelessly, and lesser men get utterly lost.

Bimetallism has been defined as "the attempt to make one perma- nent, scientific, automatic monetary standard by the union of two metals, gold and silver, at a ratio and weight to be fixed by Gov- ernment authority," and the same writer gives it as his opinion that "no two different substances can be exchanged *for any length of time*

upon parallel lines of quantities and values, neither can they be produced for any length of time on parallel lines of cost."

"The history of nearly five centuries of the metallic currency in England," says Dodd in "The History of Money in the British Empire and the United States" (p. 131), "proves the truth of this statement. Notwithstanding the efforts of the Government to fix a Mint ratio between the metals that should correspond as closely as possible with the market ratio, the Mint and the market ratios were constantly at variance, and the relatively cheaper metals always tended to flow out of the country."

Where English commercialism failed Roman contempt of commercialism was not likely to succeed.

Let the reader consider for a moment the difficulty that we in our time experience in grasping monetary problems, and price level phenomena where we have only to deal with the single standard and have the assistance of carefully kept statistics, index numbers, all the data that printing and printing alone makes possible. The ordinary modern business man living his life among figures and dealing with economic problems is usually unable to follow these complexities, as witness the difficulty experienced by economists in bringing home their meaning to the public. Imagine then the position of the Roman banker or administrator dealing, not with one standard but two, and sometimes three; with no paper, no printing, no newspapers, no organized statistics in our sense, no index figures; the things which we find indispensable in that banking which the Romans regarded either as immoral or beneath a gentleman's notice. This point is more important than it might at first sight appear. The Roman state was, by virtue of its imperialist exploitation, a great commercial concern run by men who held finance and commerce in contempt.

"For a Roman patrician to descend to 'trade,'" says W. S. Davis, in "The Influence of Wealth in Ancient Rome," [41] "would indeed have been a humiliation greater than a like calamity to an English 'mere Lord' or a German 'Freiherr.' To a Claudian, reckoning in T

erius' time twenty-seven consulships, five dictatorships, seven censorships, seven triumphs and two ovations, or even to a Livian with only eight consulships, two censorships, three triumphs, and a dictatorship, such a descent from a lordly eminence to vulgar commerce was unthinkable. It would have meant social ostracism and probably imperial censure."

Cato Major took pains to point out that the usurer was branded by the Roman law as a greater evil than the common thief, and he made the dishonesty of loans sufficient grounds for declining them as investments. Indeed, Cicero makes him avow that "usury is a form of homicide."

Cicero in his *De officiis* has summed up the opinion of his day on the callings and professions. He ranks as ungenteel and unworthy of a gentleman the business of tax gatherers or money-lenders because "they come into collision with the ill-will of men." He bans all sorts of hired labor and men who are paid, not for skill but for mere work; small retailers also, because "they make no profit except by a certain amount of falsehood;" all mechanics, "for a workshop can have nothing respectable about it;" all the trades that minister to the sensual pleasures, "fishmongers, butchers, cooks, poulterers, and fishermen," as Terence says, "commerce on a small scale is vulgar, but on a large scale and "importing such from all quarters and making large sales without fraud is not so very disreditable." But of all means of acquiring gain nothing is better than agriculture, nothing more productive, more pleasant, more worthy of a cultivated man.

As early as the beginning of the Second Punic War, the conservative majority of the nobility undertook to check by law any efforts of their fellow aristocrats to meddle in commerce, and tied them forever to the land. This *Lex Clodia* forbade any senator or senator's son from owning a ship of over three hundred amphoræ burden. The small ships would be enough to carry the produce of their estates along the coast, but they would be barred from distant commerce, especially from the over-sea corn trade.

Senators were legally debarred from all business. Julius Cæsa reënacted the Claudian law. Hadrian enacted that no senator, i his own name or otherwise, should farm taxes. But although no mal commerce and financial administration were discreditable, co ruption apparently was not.

"The slave system," says Draper ("The Intellectual Developmer of Europe," p. 249), "bred that thorough contempt for trade whic animated the Romans. This contempt threw them into the occup tion of the demagogue, making them spend their lives, when n engaged in war, in the intrigues of political factions, the turbulen of public elections, the excitement of lawsuits. They were the fir to discover that the privilege of interpreting laws is nearly equal that of making them. . . . The Roman demagogues, as is th instinct of their kind, made political capital by attacking industri capital. They lowered the rate of interest, prohibited interest, an often attempted the abolition of debts. . . . The accumulation power and wealth gave rise to a universal depravity. Law ceas to be of any value. A suitor must deposit a bribe before a trial cou be had. The social fabric was a festering mass of rottenness. Th people had become a populace; the aristocracy was demoniac."

Extortion, though not as gross as under the Republic, often e riched provincial governors (Friedlander, "Roman Life and Ma ners under the Early Empire," pp. 120-121). The Senate itself– body too predisposed to condone its own members, and very open bribery—was the court before which they had to appear. Sene says in bitter irony: "The provinces were plundered, and judgmer knocked down to the highest bidders," no remarkable fact, as t purchases could be resold by the *ius gentium*. Pliny the Young in the years 100 and 101, was taking up the "guiltlessness" of Vit lius' and Otho's administration. Proof sufficient is given of t exceptionality of it. Any province that applied to an advocate Rome to take up its cause was sure to be one which had be plundered out and out. Juvenal exhorts one great nobleman, wh his province fell to him at last, to show his helpless allies some c

deration, as "their very marrow had been sucked out." The victims got no good of the condemnation of their oppressors, for law exhausted the prosecutor's purses, and a Pansa had to be paid for punishing a Natta's robberies.

Opulence and senatorial rank were interchangeable terms. Hnæus Lentulus the augur, under Augustus, possessed 400,000,000 sesterces, the largest private capital known in antiquity. The annual income of some properties would have been nearly as much as the revenues assigned by Olympiodorus to the richest Roman families at the beginning of the first century, viz., one million dollars.

Yet those who could not exploit were poor. Hortalus, in 16 A.D., accompanied by his four sons, appeared in the Senate and begged for relief of his penury. Tiberius brusquely refused; offensively doled out 200,000 sesterces to each son, and would hear no more of them. In the beginning of his reign, Nero scattered broadcast gifts of half a million to poverty-stricken families; for example, to Valerius Cotta, his fellow-consul in 59, and to Aurelius Cotta, and Haterius Antoninus, though they had consumed their inheritance. Vespasian, too, was very generous, made up the amount of the census and gave needy consulars annual incomes of half a million. Hadrian distributed to senators, when innocently bankrupt, moneys proportionate to their families, sufficient for their state and often for life.

This type of society does not augur well for the management of what was a great commercial concern. Friedlander tells us that the utmost forethought on the part of the emperors could not prevent deficient supply and consequent appreciation in prices, for the over-populated city was entirely dependent on imported grain. And then disturbances arose. One reason that private commerce could not absolve this need, was that the contributions in kind, which were imposed on the corn-lands, left but little over for export. Egypt paid her double-tithe, in the form of a four months' supply of the needs of Rome; the province of Africa (under Vespasian) for the remaining eight months. Further, private commerce could not

compete with the fisc, which sometimes used to sell below cost price the corn it received partly as tribute, and partly as purchase by its agents: consequently private corn-market speculations, however much encouraged by the emperors by the granting of honors and privileges, failed of practical effect.

"During the first two centuries," says Friedlander, "were the government good or bad, appreciations in price recurred again and again." During the years 5-8 a famine occurred, partly through the flooding of the Tiber, partly through bad harvests, and the price of grain went up to five or six times the ordinary sum: an adult's monthly ration (5 modii or 43½ liters), ordinarily selling at ⅝ denarii, was sold at 27½ denarii, an unprecedented event. All slave families and bands of gladiators, all strangers except physicians and teachers, even some slaves privately owned, were expelled from the city: Augustus and others dismissed most of their domestics. Yet only through extraordinary exertions was a rising averted.

In the year 19 prices again went up. Tiberius, yielding to popular clamor, fixed a maximum price for corn, and paid the corn dealers two sesterces more per modius. In the year 32, again, high prices almost caused disturbances. The Emperor was away at Capri and the mob vented its complaint in unusually riotous fashion. The diversion of many transports to the building of Caligula's bridge from Baiæ to Puteoli (39 A.D.) injured shipping to the extent of again raising prices in 41 A.D.: and Claudius was thereby forced to extend the harbor at Ostia. Bad harvests had the same consequence once more in his reign, in the year 52. Only fifteen days' provision was in hand; a tumult broke out, and Claudius himself scarcely escaped the rage of the populace. Fortunately the winter was mild and the incitement given to shipping and the corn-trade by the Emperor's large subsidies had a favorable effect. In the year 68 just before Nero's death there was famine, and the ill-will of the people was increased by the news of the arrival of a ship from Alexandria with Nile-sand destined for the Emperor's wrestling-school. In the year 69 there was a terrible famine, furthered by lack of industry

and general insecurity as already described. From between Hadrian to Commodus (under Hadrian the famine apparently spread over the whole of the greater part of the Empire) Rome was visited at least once by scarcity and dearness of food.[42]

This is but a sample of the type of problem which the Roman administration added to monetary problems which baffle even modern American bankers; and which a people who held finance and business in contempt attempted to solve. The general picture of Roman society which the above few details suggest must be kept in mind in attempting to answer the question put in the next chapter.

CHAPTER VI

GOLD AND THE RISE AND FALL OF CIVILIZATION

What part did the scarcity of the precious metals play in the fall of Rome and their increase play in provoking the Renaissance? Some large historical generalizations and why we should be cautious in accepting them. Del Mar's case for the view that the ancient world at times liberated itself from dependence on metal in monetary matters, and prospered most when it did so. Need Man be the slave to the precious metals? How the Roman problem is related to similar problems to-day and the underlying issue of Alison's generalization about gold and civilization.

CHAPTER VI

GOLD AND THE RISE AND FALL OF CIVILIZATION

"The two greatest events in the history of mankind have been directly brought about by a successive contraction and expansion of the circulating medium."

Such are the words of an English historian, Sir Archibald Alison. His generalization is so interesting, so suggestive and important (and possibly so false) that the passage in which he makes it is worth quotation.

> The fall of the Roman empire, so long ascribed in ignorance to slavery, heathenism, and moral corruption, was in reality brought about by a decline in the silver and gold mines of Spain and Greece. . . . As if Providence had intended to reveal in the clearest possible manner the influence of this mighty agent of human affairs, the resurrection of mankind from the ruin which these causes had produced was owing to the directly opposite set of agencies being put into operation.
>
> Columbus led the way in the career of renovation; when he spread his sails across the Atlantic, he bore mankind and its fortunes in his bark. . . . The annual supply of the precious metals for the globe was tripled; before a century had expired, the price of every species of produce was quadrupled. The weight of debt and taxes insensibly wore off under the influence of this prodigious increase; in the renovation of industry, the relations of society were changed; the weight of feudalism cast off; the rights of man established. Among the many concurring causes which conspired to bring about this mighty consummation, the most important, though hitherto the least observed, was the discovery of Mexico and Peru.

In juxtaposition with the quotation from Alison one might well put a passage or two from well-known economists indicating the orthodox and classical view of the relation of a plentiful supply of the monetary metals to economic well-being. Professor Lyman J. Gage [1] says:

As a general proposition the quantity of gold is not a matter of great importance, for, given a certain quantity, be that quantity great or small, it will in the long run tend to relate or establish prices of things and wages or labor. Multiplying the prices of all commodities, labor, and services by ten would not make any one richer. Dividing prices would not make any one poorer, since once established the exchange ratios of commodities and the power of labor to purchase goods would not therefore be relatively changed. It is true that a sudden change in prices, either in one direction or the other, would create incidental hardships, because the change in prices could not in the nature of things be uniform or simultaneous, and time contracts would be radically affected.

Charles Gide, the French economist, says:

Economists have shown little concern about the amount of money and maintained that it is a commodity like all other commodities, and ever inferior to others because it is in itself incapable of satisfying any want directly, or of affording any pleasure. It is consequently the only commodity of which we may say that its abundance or scarcity is a matter of perfect indifference. If there are few pieces of money in a country, each one will have a greater purchasing power; if there are many, the purchasing power of each will be smaller. So what does the quantity matter? [2]

As between these two positions where does the truth lie?

It should be noted, perhaps, that Alison is particularly given to large and dogmatic generalizations, and seems to have been taken into the confidence of Providence whose intentions in historical matters he is quite frequently revealing. If his generalization in this matter stood alone it would not perhaps be worth much attention, but he expresses a view held by quite a number of historians and some economists. In any case it serves as a useful text for pointing out certain truths concerning the relationship of money and civilization.

The answer to be given to the question just asked ultimately depends not so much perhaps upon our reading of a certain set of facts in monetary history, as upon our view of the degree to which it is possible for man to adapt environment to himself and himself to

nvironment; of how far man is necessarily puppet of such fortui-ous circumstances as the discovery of a new gold mine or silver nine.

We have just reviewed, very briefly, the monetary history of Greece and Rome. We found in the case of the latter empire a very omplex manipulation of standards and currency. We found that or long the standard money was copper; then silver was added, hen gold; that sometimes there was a double and sometimes even triple and quadruple standard. In the case of Sparta iron had een the standard; that for many centuries money was used success-ully in a high state of civilization without the use of either gold or ilver; that, indeed, the most stable civilization of all existed for omething like three thousand years without coinage, and some-imes, as in the case of China where coins were used, gold was never mployed for long periods, nor even silver; that the oldest existing ivilization, and on the whole the most stable known to history, did ot need the precious metal at all.

For twenty-five centuries we find great civilizations that do not now coinage, and do not employ money as an everyday thing and n the modern sense at all; during another twenty-five a dozen dif-erent ways of using the money tool, a tool which incidentally man id not "invent" but into the use of which he slipped almost unno-iced. It is plain that he often misused it, that it often got out of con-rol and that, again and again, he failed to trace clearly cause and effect in his use of it. The Greeks, because their social and political problems were in so many respects simpler than those of the Ro-mans, never allowed money to get out of hand. Sparta, indeed, saw he danger to such an extent that she never allowed coinage, duplica-ing in this the decision taken at times, consciously it would seem, by China on the other side of the world. It may be argued that this was done at the expense of civilization and that "Sparta became a stagnant backwater of civilization and China a tranquil lagoon." But Egypt seems to have had the same instinctive fear of money in the form of coinage, and despite this, managed for thousands of years to

maintain an extremely elaborate civilization. The kind of monetary difficulty with which the Romans wrestled could only come with coinage, and coinage ("a surprisingly late addition to the human heritage of economic knowledge" as Mr. A. R. Burns puts it), having waited thirty centuries since men first made exchanges by means of a third commodity might, in slightly different circumstances, have waited another ten or fifteen, by which time man might have been ready for making his everyday currency a purely token or book-keeping thing, liberated from dependence upon metals at all.

This point is raised because even if we accept Alison's view as true within limits, we may misread the whole meaning of the history of money if we neglect the qualifications that should be added to his conclusion.

The implication of the view that civilization has depended upon the discovery of gold, or the failure to discover it, is that man's fate is by nature and some law of his being linked helplessly to gold that if this fails him his civilization must die; that he is as helpless in the presence of the failure of gold and silver mines as he would be before the cooling of the earth or the advance of a new ice age, and that consequently, the frenzied and murderous scramble for the precious metals which we saw in Elizabethan times is simply part of the inevitable struggle for life. Such a view distorts alike the nature of money and, let us hope, the nature of man. In our own time for considerable periods (as during the War) nations got off gold altogether and are finding that even in peace time it is an exceedingly unsatisfactory basis for money; are questioning whether it ought to be retained, and, if retained, whether we ought not to control its value consciously, to make it, that is, our servant instead of our master. What is certain is, that should the world now be faced by a shortage of gold—which it may be—it is extremely unlikely to sit down helplessly under such an event and see its civilization go to pieces as, it is alleged, Rome's went. We are taking steps to the end of bringing the thing under proper control. We, at least, realize that the use of gold is not fated; that if it should prove an

nadequate or dangerous tool for our purpose we can, if we are wise nough, reshape that tool or abandon it, and use another.

It was open to the Romans to do as much. And if the reply is iven that that would be asking too much of their newly born monetary society, then that reply means that the true conclusion from he facts is not that the gold or silver or other monetary metals so ong used were insufficient, but that the Romans were not yet rained enough to use them as money. Indeed they had, by the ime that they drifted into the inclusion of gold among their coinge metals, tied themselves up in such monetary complications, and heir society otherwise was suffering from such stresses, that we nay well doubt whether, even if the supply had been much greater nd the mines all but inexhaustible, they would not have slipped into he abuses with which their history has made us familiar. We are ompelled to ask whether even if gold had been as plentiful as silver, nd silver as plentiful as the copper which they used for money o long, there would not have happened to the precious metals what appened to copper.

It may be argued: It is fanciful and far fetched to suppose that hese ancient peoples without printing or paper could have achieved management of currency which is baffling and all but insoluble o modern banking with its elaborate technique.

But there is at least some ground for supposing—and some proound students of monetary history are indeed convinced that it is he case—that some of these ancient peoples did for long periods ive under a system of managed currency, and that it served their nds far better than the "intrinsic value currencies" to which they apsed. They achieved this—if they did—not by the elaboration f any intricate technique, but by the acceptance, almost accidental, ertainly not very conscious or analyzed, of a single underlying rinciple, namely, that the value of money should be a matter of ocial authority controlling its quantity; that it is a means of social ookkeeping, a piece of money being evidence that its holder is ntitled to a certain amount of goods. This stabilization of prices

we in our day are hoping to achieve by an elaborate technique o banking, discount rates, rationing of credit, sale and purchase o securities, fiduciary currency legislation, Federal Reserve System international control of gold. But these ancient societies might wel have achieved roughly the same end in a much simpler way—b making the quantity of money (in their case not complicated by it extension through banking and credit devices), a matter of publi authority; by the acceptance of the principle that the value of mone did not rest upon the commodity value of the material of whic it was composed, but upon the amount which the community agree to issue and accept as money.

The great protagonist among economic historians for the viev that this was actually achieved by ancient peoples was Del Ma And though his evidence is slight, we cannot summarily reject h conclusion. Mankind has so often been mistaken in monetary ma ters that in the law of averages it seems likely it would now an again pitch on a right idea.

It is Del Mar's reading of history that what he calls the "legal conception of money, the view that the value of money is a matte for society to determine through its constituted authorities (whicl of course, is coming more and more to be the view of economis and the practice of modern societies), was achieved for long perio by many peoples and that those periods were their best.

The evidence which alone could prove such a contention is nece sarily so patchy and unreliable that no historian ought to be do matic about it, and Del Mar was very dogmatic, and mixed th presentation of his case with dubious theories of the part played b the cost of production in the value of metallic moneys. This ma account for a certain disregard of Del Mar's researches by mode monetary authorities. Mr. A. R. Burns, for instance, does not me tion him though Professor Moulton refers to him as one who h "doubtless given more study to the origin and development of mon tary systems than any other student." [3]

Some of Del Mar's evidence, in so far as it deals with the speci

ase of Greece and Rome has been given in the preceding chapter. t is worth while, keeping always in mind the cautions implicit in vhat has just been said, to consider his case as bearing upon the vide question of the relation of the precious metals to the rise and all of civilization. It is certainly relevant to Alison's case, in that Alison in effect says: "When the precious metals were plentiful men prospered; when they became scarce civilization declined." Del Mar's case is that when men ceased to worry about the metals at all n connection with their money they prospered; when their money ecame synonymous with metal, and became tied to it, their civiliation went to pieces.

Del Mar puts one part of his case (but note that it is only part of :) thus:

> The production of any valuable raw material out of which money is permitted to be made *ad libitum* must of necessity become at some time or other unprofitable, because every atom of it obtained from nature is sooner or later added to a stock which is itself the measure of the value of the remainder. The greater the stock of this material—say gold or silver—the less will each pound of it newly extracted from the earth purchase of other commodities. A time must, therefore, come when the mere cost of subsistence—for even slaves must be provided with food—and of supplies for the mines, will overcome the value of the product, and the system, and with it money and government and civilization, must come to an end. To the comprehensive mind metallic money seems like one of those machines designed by illiterate mechanics for perpetual motion; it carries with it its own negation, and though it may go for a long time without showing any signs of failure, in point of fact it has begun to fail from the very instant when it was first set in motion.[4]

He elaborates elsewhere thus:

When the value of gold and silver conforms to the economical cost of their current production, and "free coinage" prevails, the coins which happen to be in a country cannot be increased at pleasure by industrial means, because any addition to the coins would lower the value of the whole stock, and also that of the material of which they were made. This would arrest mining, and the arrest of mining would diminish the product of bullion and lower the stock of coins to its previous limit.

Thus money, so long as its value conforms to the cost of its production, repudiates its own office. Cost fixes the quantity of money, a fixed quantity of money fixes prices, and fixed prices invite barter and lessen the necessity for money. To a growing population the only relief to such a state of affairs is war, conquest, and slave mining; and indeed to such devices have all nations been driven who have founded their societary relations upon metallic money. The civilizations of India, of Egypt, of Greece, and of Rome have all moved toward a vanishing point, and that is where gold and silver mining ceased to be sufficiently productive; and unless proper measures to avert it are adopted in time, it would seem that that of the modern world must move in the same direction.[5]

He applies this general theory to the specific case of Rome thus:

Rome had acquired from all parts of the then known world, chiefly by plundering its inhabitants, skimming its gold placers, and working its reef mines, by slave labor, such an immense quantity of the precious metals that their value became depressed far below the current cost of producing them from the mines, so that at length it became cheaper to procure metal by melting coins than by mining for it. The growing unprofitableness of the mines led to greater exactions and increased cruelties on the part of the mine-masters, and these to bloody insurrections of the mining populations, and finally to the aban-

donment of the mines by the State. . . . The abandonment of State mining was followed by the decay of the Roman monetary system. As time went on and metallic money grew scarcer and scarcer, it again became profitable to work the mines; but it was now too late to reopen them. Strange races had found their way into Europe, and barred the way not only to the mines, but also to many of those pastures and fields which hitherto had been cultivated for Roman profit. A long-continued and disastrous fall of prices occurred in Rome, which manifested itself at first in the depression and afterwards in the relinquishment of trade. To remedy the depression, the coins of Rome had been again and again degraded and debased, but to little purpose. The relinquishment of trade continued, social disorders increased.[6]

Now certain of the propositions above mentioned are very questionable; but they are not indispensable to Del Mar's view that "numerary" money often obtained in the ancient world to the great advantage of the peoples who had thus liberated themselves from the tyranny of dead metal. He over-emphasizes the part that cost of production plays in determining the value of money and seems at times to confuse mere price fixing legislation, which all ancient states enacted, with efforts toward a conscious control of money for price stabilization purposes. Most states were continually making legal tender enactments and trying by legislation to fix prices, but this does not mean that such peoples were one iota less at the mercy of the metal value factor as the determinant of the value of their money. Further, where the value of a currency is dependent, not upon the material of which it is made, but on state enactment, the problem of foreign exchanges becomes an extremely difficult one. And although we had monetary unions in the ancient world, and had in Renaissance times an international unit of account agreed upon by the great merchants and trading corporations, exchange questions, given the conditions of the ancient world, must have made

the maintenance of currencies dependent upon legal action ex
tremely difficult.

With reference to the part which he assigns to the cost of produ
tion in determining the value of "intrinsic" money, it may b
pointed out that the value of metallic money depends only to a less
degree on the cost of production of the precious metals, and to
greater degree on supply and demand. The working of gold an
silver mines has always been carried on more or less as a specul
tion; for, though men have been attracted to it in the hope
making large gains, in many cases mines have been worked at
financial loss; moreover, the increase in the amount of precio
metals is generally so slight in proportion to the whole stock
metal in circulation that the effect of new supplies on the value
money is only very gradually felt, and it is usually offset by other fa
tors which come into operation, those other factors including veloci
of circulation, and, in the modern world, elaboration of cred
"The gold-using groups of states may raise a larger superstructu
of paper and credit money on the same stock of gold; the great
number of units of money so created will cause the value of th
unit to fall, even if the unit be a gold coin. This is just what ha
pened as a result of the War; gold fell to about two-thirds of its pr
vious value." [7]

Furthermore, in the ancient world, as one authority points ou
gold and silver were produced by slaves under the pressure of fe
and were drawn towards the ruling parts of the great empires; in
word, war, not commerce, was the distributing agency. From th
condition of affairs it is easy to see that, whatever may be the reasc
for assigning to cost of production a potent influence over the val
of money in modern times, no such reasons then existed. "The pr
duction of the precious metals was carried on in similar manner
the great buildings, and other works of those periods, on no
economic grounds, and therefore produced quite different effects.

A complete exploration of the quantity theory of money does n
belong to these pages, and readers interested may be referred to a

ood modern textbook on money. Del Mar's views did not on
ie whole depart far from accepted views of our day and he antici-
ated (writing nearly half a century ago) in a remarkable fashion
iany of the views of modern economists (summarized in the last
iapter of this book) in their insistence upon the inadequacy of gold
; a stable measure of value and upon the need of stabilization
irough the control of the quantity factor. For the layman it may
e explained parenthetically that there is nothing that runs counter
) orthodox economics in the assumption that, given the technical
ipacity, this control of the purchasing power of money can be
:hieved. Professor Alfred Marshall, the father of the modern
ambridge school of economists, says: "It has often been suggested
iat the supply of a nation's currency itself might ultimately be so
djusted as to fix the purchasing power of each unit of the currency
osely to an absolute standard. In spite of the severe criticism to
hich this suggestion has been subjected, there seems no good
round for regarding it as wholly impracticable; but many long
nd tedious studies, stretching perhaps over several generations, and
iany tentative experiments moving cautiously toward the ideal goal,
ould need to be taken before any large venture in this direction
ould properly be made." [9]

The interest of Del Mar's work, apart from his views of monetary
ieory, is that, with a vast array of facts before him he came as we
ave already noted to the conclusion that many ancient peoples ac-
ually did achieve this end. "Among the highly civilized nations
f antiquity, before felted paper, or paper of sufficient toughness for
ie purpose, was invented, the symbols of such money consisted
f porcelain tablets, as in China; thin iron discs, as in Sparta; highly
rtistic copper discs, as in Rome; discs of a secret metallic compound,
s in Carthage; or tablets of stamped clay or leather, as in several
ther states. In all cases where these moneys permanently retained
ieir original value, it was by means of limiting the number of
ymbols employed."

Finally, he shows how greatly the conception of money has varied

throughout history. While among the more civilized of the ancient it was a social convention for the measurement of value, "a lega conception, an institution of law designed equitably to measur value," the feudal conception of money was that of an actual Thin (a coin or coins) apart from any social convention or contract. I his view when Rome fell under the hypnotism of gold the concep tion of money underwent a change, "the lure of spoil, the attractiv hazards of gold and silver mining, the fascination of possessing thes beautiful metals, rendered the governing classes blind to the influ ence which their adopting as money was exercising upon the we fare of the state. The old aphorisms concerning money were fo gotten. Money was no longer an institution of the state whic connected every exchange, both with the past and the future; was no longer an idea, it was a fact; it was no longer a symbol, b a thing; and to that thing, as it came, radiant, and glistening, fro the temple of Juno, cleansed of the blood of innocents, and the swe of captives that had won it, was given the name 'moneta.'" Fro this time forward money ceased to be looked at from a comprehe sive point of view. "There was no such thing as a system of mone there was no attempt to ascertain, much less to regulate the volun of money; there was no law of money. The unit of money was longer all money, but any one portion of it, provided it had up it that mark of authority which certified its validity. This conce tion of money lasted until about the third or fourth century of o era; then it took another step toward materialism. It had fall from numerata to moneta; it was now to fall from moneta to pc derata. The mark upon pieces of money was no longer an assu ance of their validity. It was now necessary to weigh them. It w no longer coins that people were dealing in: it was quantities gold, silver, or copper. Everybody was a buyer and seller of jur and from ponderata—until the weights themselves were degrad and exchange was conducted by means of services and commodit —the thing fell to barter."

The order of revival after the Renaissance discovery was mu

the same in reverse order, Del Mar thinks. It began with the fixation of weights, and money was weighed *ad scalam,* and assayed or tried by combustion. Following this came pieces marked with the names of weights—to wit, pounds, shillings, and pennies, denies, or denarii, which passed by tale. Del Mar does not regard the American gold discoveries an unmixed blessing. Man was saved for a time by something external to himself, not by his understanding. "It is scarcely to be doubted that but for the adventitious conquest of America, the feudal and vulgar conception of money would have died away with the re-growth of the Civil law, and that the reconstruction of powerful kingdoms and empires from the numberless political fragments into which Rome had split would have forced upon the popular mind the conviction, already entertained by the learned, that money was not merely a Thing to be immediately bartered for other things, but an Institution of Law designed equitably to measure the value of commodities, and services, both past, present, and prospective."[10]

But the conquest of America and the Orient by supplying metals prevented this development.

Nevertheless, with the invention of printing, the devices of banking, the experiments, even disastrous experiments, with paper money, the world would never again, Del Mar wrote, in a time of falling prices, be as helpless as it was before, and his final reflections, written half a century since have a curiously prophetic and modern ring, especially his reference to the need for mankind to learn "the nature of money and how to manage it." Writing of the eighteenth-century financial experiments in France, he says:

> The fatal course of permitting prices to fall to the level when gold and silver mining becomes profitable, the course which the empires of Rome, of Charlemagne, of the medieval ages, had been obliged to follow, was no more to be entered upon. Its day had ended when printing was invented, and when paper money in America, in England, in France, and elsewhere, had swollen the measure of value too far beyond the limits of mining, for it ever to enter them again. Henceforth prices were to fall temporarily and at

uncertain intervals, until mankind had learned the nature of money and how to manage it; but they were never again to fall permanently. For that gravest of all dangers to States, and to the social development of the world paper money has at least the merit of having offered an efficient remedy Perhaps the time is coming when it may also offer a remedy for inflation, for violent fluctuations, for unstable prices, and for those sweeping bankruptcies which arrest the march of progress, and again and again postpone the development of civilization.

These somewhat lengthy excerpts from Del Mar are justified on two counts: His views, despite a certain queerness and extravagance in their presentation, come nearer to general acceptance every year he is much nearer to being in agreement with this generation than the one for which he wrote; and the second count is the fact that he has been neglected and very generally overlooked.

In the survey of Roman monetary history contained in the previous chapter reference was made to the difficulties which Rome, like her successors, found in maintaining a double standard without one metal driving out the other; and there is little reason to suppose that she was more successful in that attempt than other states have been. Doubtless, also, at times she tried bullionist expedients by restricting the export of bullion and drawing as much of the currency as possible into her own hands. "But Rome's policy was by no means consistent in this direction, and neither Roman nor any other ancient State arrived at the conception, which was to be so closely associated with the later Mercantile System, and helped mainly to give it the name, that the best way in which to procure treasure was to maintain such a balance of trade as would bring into the country a larger quantity of money than that which it took out—or at the connected notion of an import tariff designed for the protection of native products." [11] Her means of securing bullion was more direct —by tribute. Those individuals who could secure the bullion were enriched. But it certainly did not permanently enrich the state. It raised prices and diminished the value of existing fortunes, and those whose incomes had originally been adequate found them inade-

quate. The bullion did not promote Roman industry, and it did destroy possible markets for Italian produce, both by the drain of the money, and by the drain of man power by slavery and destruction as described in the last chapter, and no mere increase of bullion would have saved the State any more than a vast increase saved Spain.

But there is need of discrimination, in regard to modernist interpretation of ancient history, especially of ancient imperialism. Such versions of Roman imperialism as are conveyed to us by Mommsen and Ferrero have been forcibly challenged in recent years by Professor Tenney Frank and others, who argue that the passages usually cited with reference to commercial rivalry with Carthage give no real support to the theory, which rests not so much upon the testimony of the ancient records as upon ideas read into them from the history of modern times. The republican government apparently took little interest in foreign trade, and Rome, in the view of Professor Frank, J. W. Horrocks and others, certainly did not behave towards her conquests as we should expect her to have done if commercial expansion had been her determining motive. Under the Empire, the wars of Rome were in the view of this school of historians almost invariably defensive in origin or purpose. The economic interpretation of history, which finds congenial subject-matter in the rise and fall of Carthage, has been pressed too far, it would seem, in the attempt to expound the bases of Greek and Roman civilization.

"The excessive State regimentation of industry and commerce," concludes Mr. Horrocks, "which came to prevail alike in the Hellenistic and the western portions of the ancient world, and which reached its climax about the middle of the fourth century of our era, marks that loss of economic freedom which was a potent cause of the breakdown of the Graeco-Roman civilization. With the fall of the Empire in the west, involving a relapse into natural or barter economy—though in the Byzantine or Eastern Empire a money

economy was retained—the politico-economic evolution of western Europe had to make a fresh beginning." [12]

The foregoing will suffice to suggest certain facts and considerations which must be taken into account in connection with Sir Archibald Alison's somewhat fatalist and materialist reading of history when he suggests that civilizations fall when gold and silver decrease. While his generalization is true enough within limits and granted certain conditions, it is important to realize what the limits and conditions are.

The facts we should remember are:

1. For centuries very stable civilizations—some of the most stable known to history—have been maintained without gold or silver at all. Furthermore, for many centuries gold was not, even in the West, the chief monetary metal. In addition to silver the earlier states had used with success copper, bronze, and even iron. If the present supply of gold, unaided by silver, is adequate to the enormously increased population and accelerated commercial activities of our time, the supply of silver if not of gold should have been adequate to the Roman world if its use had been efficiently organized.

2. Monetary organization was doubtless made extremely onerous for Rome by the known difficulty of working a bimetallic or still more a multimetallic money system; the all but impossible task of maintaining a ratio between two metals so that neither tends to disappear or be exported. (This difficulty harassed the financial capacity of every European state for two thousand years after the first use of gold by Rome.)

3. The obvious inefficiency of the Roman state in handling its currency problems; the ever-ready resort to inflation and debasement with no very clear realization of what was happening. This inefficiency was in part due to (a) the contempt in which trade and finance were held by the governing orders; (b) no equivalent contempt on the part of those orders for profiting from public plunder of all kinds; (c) a rudimentary banking system inadequate to its task when, in addition to the foregoing factors, we add the absen-

of paper, printing, or check system, and the presence of a system of numerals which would make scientific accountancy all but impossible even in these days of paper and print.

4. In view of these last named factors, and of the subsequent history of states like Spain that had superabundance of gold, one is hardly justified in supposing that even if the natural supply of gold and silver had been much greater than it was, such added supplies would have checked the inflationist tendencies which expressed themselves in debasements, plated coins, etc. It would have been just as likely to accelerate them since the tendency to inflation bears no necessary relation to the quantity of metal available and the larger supply may have been just as inadequate as the smaller. The more that a state inflates, as we came to know in Central Europe after the War, the more, usually, is it obliged to. It was when paper money was being printed by the ton daily, that the banks found it hardest to get enough money. If we could have imagined the output of gold being increased a hundredfold during the time of, say, the Emperor Caracalla, there would still not have been enough. It is in the process of monetary reform that states in the modern era have abandoned a plentiful metal like silver and taken to one thirty times as dear.

5. If Rome suffered at times from too little gold and silver she certainly suffered at times just as badly from too much—from rising prices that is. For the natural supply therefore to have insured a good monetary system that supply would, at times, have had to diminish as well as increase: and that is asking a good deal of Sir Archibald Alison's Providence.

CHAPTER VII

MONEY ILLUSIONS THROUGHOUT THE AGES

The persistence throughout history of the confusion between money and wealth and the national policy which aimed at securing gold or silver and keeping out goods. How this Mercantilist or Bullionist policy defeated itself. The modern form of the Money Confusion as exemplified in the Reparations embroglio and the attempts at the economic settlement of Europe. America's concern in the matter and current fears about loans to Europe. What is the "money" that we loan and how can it be repaid? What the Mercantilist idea is doing to Europe now that it is linked to Nationalism. The false analogies which make a combination of the two ideas so dangerous. The hypnotism of gold and a note on the old Alchemists.

CHAPTER VII

MONEY ILLUSIONS THROUGHOUT THE AGES

WHETHER we take the view, with some, that in so far as monetary difficulties entered into the downfall of Rome it was because, as Wells puts it, "money got out of hand" and men failed to manage it, or because the supply of the material of which it happened to be made failed and could not be made adequate, this much is certain: money, like dynamite and other tools used by men, can very greatly damage, as well as very greatly serve, his society.

And it is characteristic of the damage that it can sometimes do, that usually the ordinary man fails to see any relationship between the behavior of money and the trouble from which he suffers. Economists, quoted in other chapters, tell us of the difficulty that they have experienced in persuading business men that the dollar is unstable in value; that men who pass their lives in handling and making money persist in talking of a rise in the cost of goods when they should be talking of a fall in the value of money,[1] just as a man sitting in one train and watching another, is for a time unable to say whether it is his own or the other which is moving.

But this is only one and a relatively minor phase of the confusions which mark the understanding of money and its relation to goods, to wealth. We saw in the previous chapter that part of the failure of the Romans to manage the money mechanism, which was rapidly becoming rather complex, was due to the absence of an efficient technique, in its turn due, in part, to the absence of paper, printing, a convenient numerical system, but much more to the general failure to see certain of the simpler laws of money like those governing the ratio between the precious metals; or the operation of the Gresham Law by which there is a tendency in given circumstances for "bad

money to drive out good," as a rather over-simplified phrase puts it

But as we trace the history of money throughout the ages we find that confusions of this kind have done less mischief than one or two dominant fallacies, which in their crude form seem so absurd that one wonders how they could have taken possession of the human mind as they did for thousands of years, and dominated nearly all its thought about money.

The most practically mischievous of all these fallacies, perhaps, is the one to which economists usually give the name of Mercantilism, "the system of economic doctrines and legislative policy based on the principle that money alone constitutes wealth." [2]

Professor A. G. Moulton, in his work on "Money," [3] says:

> The general confusion of mind that has always existed with reference to the nature and functions of money, and the widespread and persistent belief that money is somehow synonymous with, or at least a superior form of, wealth, and that in consequence its accumulation is one of the chief ends and aims of individuals and of society, are the main underlying causes of the great monetary movements and controversies of history. At bottom, the trade regulations to secure importations of specie, the periodical debasing of the currency, the issues of irredeemable paper money, and the use of two metals as a standard were all largely caused by the belief in the virtue of much money.
>
> Nevertheless this general confusion of money with wealth must be taken as the starting-point of an understanding and appreciation of monetary history. Approaching the study of money from an academic standpoint alone affords but a meager understanding or appreciation of its relation to economic development.

Messrs. Foster and Catchings, [4] referring to certain very obvious differences between the position of the community and that of the individual on the matter of money, say "It may seem too simple to need emphasis," but add that, as a matter of fact, "it is not at all easy to rid the mind of the idea that an increase of money is necessarily an increase of national wealth. If a man has ten dollars in his pocket and his Government has not been playing fast and loose with its currency, he rests secure in the thought that those dollars mean

im a fairly definite quantity of potatoes, shoes, or tobacco, which certainly real wealth to him. Except as noted, however, money is ot wealth. . . . Various popular fallacies—those, for example, having do with over-production, and with the favorable balance of trade—re due to the confusion of money and wealth." Throughout the Iiddle Ages it was all but universally held that if only a country ac-umulated gold and silver from abroad and never took foreign goods all, that country was bound to become rich, although obviously in at case it would be acquiring no addition of things to eat or wear use, would not be adding to its real wealth at all.

Now that is quite self-evident. Here is an island whose popula-on live precariously, say, on whale blubber or fish, and they need very form of wealth in order to prevent the population dying of ad food, cold, hunger. They insist that nothing but gold or silver e permitted to come in from abroad. How will that help them? hey would still lack clothing, coal, wheat, bread. If they were to iscover a mountain of gold, it could only help them if they could nd that gold abroad and exchange it for consumable things. It is ere tautology to say that if a country does not get any goods from oreign countries it does not add to its wealth, *i.e.,* its stock of goods. ooner or later consumable things must come in as the result of ade, or nothing comes in, save metals which have a limited in-ustrial use, and which, if added to the circulation of currency and ever permitted to go abroad must inevitably provoke a rise of rices, must reduce what is the value of the monetary units by dding to the number of the units. This much is almost self-vident.

Yet, speaking broadly, from the beginning of the period when the noney economy became once more dominant in Europe (say, the welfth century or thereabouts) until nearly the end of the eight-enth century, the policy of the European states was guided by the ssumption that to let metals go abroad was to lose wealth. Every tate erected elaborate legislation with a view to keeping out each ther's goods and getting in each other's money. Some monarchs

employed alchemists to find the philosopher's stone which would make gold as common as iron; some caught alchemists and kept them in prison on bread and water until they should do the trick. A note on this phase of the mercantile illusion is added at the end of this chapter.

Numberless laws were passed making it a penal offense to export the precious metals and only permitting those transactions in foreign trade which on balance brought gold and silver into the country. Nations were to act on Cato's advice to the farmers, "sell, not buy."

We are not entering here into the vexed question of Protection and Free Trade. Any enlightened Protectionist knows that to go on accumulating large stocks of gold would not of itself add to the country's real income. The case for Protection is argued along other lines; and although it is true that after the sixteenth century mercantilism under the influence of men like Mun took a somewhat less ridiculous form, for long periods the Bullionist illusion as described above was absolutely dominant.

It is true, of course, that the Bullionist theory was seldom stated in the simple terms which have been employed above. If it had been as clear as that in men's minds it could not have endured for the best part of a thousand years in Europe. But it is an undoubted fact that this general idea did dominate policy. It is important to insist upon this because there has been a curious tendency of recent years among certain historians to declare that the confusion did not exist in men's minds and that in the circumstances of the times the mercantilist policies were justified. The case for that view will be stated presently. But that there was a real intellectual confusion between money and wealth it is absurd to deny, given the fact that that confusion in a more literate and educated world flourishes abundantly to-day, and linked, as it is, to Nationalism, is perhaps still the most disruptive force in European civilization.

One or two utterances from writers of this time may serve to indicate how men thought. William Richardson, in his "Essay on the Causes of the Decline of the Foreign Trade" (1744. 2. p. 113

writes: "The general measures of the trade of Europe, at present are gold and silver, which, though they are sometimes commodities, yet are the ultimate objects of trade; and the more or less of those metals a nation retains it is denominated rich or poor."

In his "Essays in Political Arithmetick" (1665) Sir William Petty makes the following statement: "The great and ultimate effect of trade is not wealth at large, but particularly abundance of silver, gold, and jewels, which are not perishable, nor so mutable as other commodities, but are wealth at all times, and all places; . . . so as the raising of such, and the following of such trade, which does store the country with gold, silver, jewels, etc., is profitable before others." [5] With a similar idea Mun wrote: "All nations who have no mines of their own, are enriched with gold and silver by one and the same means": by exporting goods to the value of twenty-two thousand pounds and importing twenty thousand pounds' worth, "we may rest assured that the kingdom shall be enriched yearly two thousand pounds, which must be brought to us in so much treasure." [6] Child thought it a general and well-grounded opinion that gold and silver were to be taken "for the measure and standard of riches," and urged that by trade England was able to export goods which brought back "six times the treasure in specie."

Even men of the caliber of Locke took the view that riches consist in having more money than the other nations of the world, especially neighboring nations. As Thorold Rogers puts it: "The opinion of English statesmen was that in order to acquire and retain abundant wealth, it was necessary that on every article exported a balance in specie should be paid to the English dealer." The Government therefore limited the market for certain important English exports 'to certain towns, called staple towns, of which Calais, for wool, the principal and most valuable of English exports, was the chief. But as the merchants might prefer their own profits to the theory of the administration, a high officer of state, called the King's Exchanger, was appointed, whose duty it was, by himself or deputy, to see that a balance of money was paid on each transaction. The first of these

officials was De La Pole, in the time of Edward III, the ancestor
those Earls and Dukes of Suffolk who had so tragic a history in t
fifteenth century." Rogers goes on:

> This official foolery went on till the time of Charles I, who appoin
> Rich, Earl of Holland, to the office. But the London merchants, from wh
> Charles was perpetually borrowing money resented the absurdity, decla
> that the patent was illegal, at Selden's instance, and induced Charles
> revoke it. I speak of the policy as it deserves, but there are people in
> own day, who might know better, who are foolish or dishonest enough
> allege that the character of our trade proves that gold and silver are leavi
> us.[7]

In form, the prohibition on the exportation of gold and silv
continued till 1816.

Mr. J. W. Horrocks in his "Short History of Mercantilism"
refers to these efforts in which the State sought to be prese
through the officers of the Staple, at every bargain made in the chi
goods exported, and to make such bargain produce bullion. On
bullion was in the country the labor was to prevent it from gettin
out. "Not only was there direct prohibition, but under the Statut
of Employments foreign merchants coming to England were r
quired to spend the money they got for their goods on Engli
manufactures, and by various devices the exchanges were manip
lated with the same object of keeping money within the realm."

Some states like Spain persisted in the bullionist policy in
crudest form and based its policy on the assumption that if it cou
secure plenty of the precious metals neither trade nor industry we
necessary. It secured the metals, in enormous quantity as we kno
and tried to prohibit their export. "That Spain was the beginner
a large scale of that exaggerated Mercantilism which looked up
treasure as the preëminent form of wealth was due to the simp
fact that the territories which she was able to annex abounded
silver and gold. . . . It was hoped that by the procurement
treasure direct from the mines and by the profits obtained from t
colonial demand for European goods and commodities, the pow

of Spain would be firmly rooted in the enjoyment of abundant wealth. In order to retain treasure in the country, not only was its carrying out prohibited, in accordance with earlier policy, but it was ordered that such foreign goods as were bought should be paid for with Spanish products, and not with Spanish money. But the system failed to produce anything other than an artificial appearance of wealth and power. The colonial monopoly for a time gave a stimulus to industry, but the influx of the precious metals had the effect for a considerable period of sending up prices in Spain to a level beyond that reached in other countries, as the veto on transportation checked any movement of equalization. Moreover, the lust for treasure gained strength at the expense of industrial enterprise, and the monopolist policy provoked attacks, in the way of smuggling and buccaneering—wherein the Elizabethan seamen especially distinguished themselves—which involved much loss to Spain. The wars on this account, and arising out of the Hapsburg holdings and connections of her rulers, involved heavy taxation which had ruinous effects upon the economic life of Spain. Commerce, industry, and agriculture alike were stifled by over-regulation, often by measures specifically intended for their protection or promotion, and the century which saw the climax of Spanish splendor saw her with a declining population. Early in the next century, the backbone of both agriculture and industry in Spain disappeared with the expulsion of the Moriscoes." [9]

With the decline of industry and agriculture, Spain found herself increasingly dependent upon foreign sources of supply and, not having goods wherewith to pay for goods, had to pay out of her treasure.

Despite, therefore, the mountains of bullion that poured in (much of it leaked out, of course, largely in payment for smuggled luxuries at extortionate prices), all records bear testimony to the country's poverty. In 1673 we hear of 40 per cent interest which the Crown had to pay, and in 1686 Spanish finance is depicted as "a horrible chaos enveloped in impenetrable darkness." In 1700, when Carlos II,

the last of the Spanish Hapsburgs, died, there was not enough mon in the Royal Treasury to defray the cost of the funeral and t masses for his soul. The reign of Ferdinand and Isabella, nominal the golden age of Spain, began with a State bankruptcy and end with such a burden of debt outstanding that Charles I (V) h repeatedly in vain to be reminded to liquidate them "to disburd the souls of the Catholic Kings." [10]

The Bullionist Mercantilism of Spain was strongly condemned b balance-of-trade Mercantilists, and Thomas Mun, the Elizabeth political writer, devotes a special chapter of his treatise to the the that the Spanish treasure cannot be kept from other kingdoms b any prohibition in Spain. "That country," he remarks, "by w and want of wares doth lose that which was its own."

How is it that the obvious was thus obscured for century aft century even for learned and thinking men? Mr. Horrocks hin at the natural history of the thing.

The development of money economy, the comparative absence credit, the growing actual shortage of bullion in the later Midd Ages, and the influx of precious metals from the West, its effe upon prices, and the enlarging needs of national revenue both peace and in war in the earlier modern age, "all these factors tend to induce a specialized attention to money or bullion as a main, not the main, element in national wealth. The less enlighten idea, arising out of medieval conditions and not unnatural to t age, but pursued well into modern times, was that every possib step should be taken to retain in the country the money or bullio already there, and to prevent money that might be brought in fro leaving it. The expedients of prohibition, manipulation of t exchanges, balance of bargains, and Statute of Employments were tried. With the changing conditions of commerce, such as the d appearance of the Staple system, and the rise and growth of t Merchant Adventurers and other companies for foreign trade, the methods of control became less and less possible and effective."

The actual process which finally modified and in the case of son

states, like Britain, finally broke up both the Bullionist and Mercantilist systems, was a gradual and piecemeal one and has been indicated by Horrocks.

The acquisition of treasure had seemed to be essential among other things in the interests of national defense, but the growth of credit and the banking system, in which connection the establishment of the National Debt and of the Bank of England are of high significance, rendered this consideration less urgent than it had previously been. Extraordinary expenditure was now met by loans, and the regulation of trade in such a manner as to produce an inflow of treasure became less apparently necessary. Moreover, as to another part of the system, the increasing spirit of enterprise and the expansion of England's markets induced a feeling that these could best be developed if all were allowed freedom of trade, rather than that certain areas should be left to the operation of regulated companies. Political factions, however, proved a strong obstacle in the way of the establishment of economic liberalism. The first real vindication of what we should to-day call the Liberal view came of course with Adam Smith. The idea that when two people or two nations traded one must gain and the other lose, and that the only way of gain is that by which exports exceed imports and so an overbalance procured in money or treasure, was denounced as entirely fallacious. In point of fact each country gained by international trade, as each obtained what it wanted and got rid of the surplus which it did not want. It was a matter of comparative values. Moreover, there could not be anything in the nature of a permanent overbalance, as a country's exports must in time be paid for by its imports. The Mercantilist view treated wealth as consisting in money, whereas, Smith argued, the true wealth was money's worth. The balance that mattered was one not of exports over imports but of production over consumption, and this might exist even where there was no foreign trade at all. The various methods whereby it was sought to increase the country's wealth by insuring a favorable balance and to promote English industry by regulation and control

are subjected to a keen analysis. He examined and condemned th bounty system, the old colonial policy, the Irish industrial and com mercial code, the system of regulated companies, the Methuen treat and the restraint on trade with France, and laid down a golden rul of international trade that it is for the interests of a nation tha neighboring nations should be rich and not poor.

There were of course many forms and degrees of Mercantilism some, within limits, and in view of the circumstances of the ag entirely defensible. As Mr. Haney in his "History of Economi Thought" [11] has pointed out "Though Mercantilism is not to b attributed directly to the use of a money economy, still, the growt of commerce, the changes in methods of warfare, and the intro duction of the wage system gave money a new importance. . . There was not the opportunity for investment open to men tha exists to-day. Industrial stocks and bonds were virtually unknown and money took their place. So, too, with various credit agencie To-day they abound and make an important part of our medium fo exchanges as well as form a means of investment. In a word, th relative importance of the precious metals was normally greater the than now."

The question of real importance for us, however, is not whether is possible now to make some sort of case for the policy on ground of rough expediency, but whether it was dictated by a fallacio assumption, by a real confusion between money and wealth. Abou that there can hardly be any doubt. Nor, indeed, that the confusio flourishes to-day nearly as abundantly and destructively as ever so fa as the ordinary man (and government) is concerned. It was re vealed by the history of the Reparations controversy with Germar and the whole inter-Allied debt imbroglio. The matter is wort attention because this problem of the money relationship of states as vital and pressing for America to-day as it ever was for th European states when the statesmen proclaimed the Mercantili doctrine as their declared policy. Indeed theirs was a less dangero fallacy in that they expressed it in a theory which could be examine

and refuted. In our day we no longer formulate the theory, but go on acting as though the theory were sound.

After the peace the Allies said: Germany must pay the whole cost of the War, but she must not be allowed to increase her exports so as to compete with Allied trade. British Members of Parliament memorialized Mr. Lloyd George when he was in Paris roughly to his effect: "Germany must pay a vast indemnity running into thousands of millions; but she must not export as much as a penknife."

And no one seemed to see that the condition made the execution of the demand utterly impossible. For years the French and British public—newspapers, politicians, professional patriots—went on shouting to Germany (as some Americans shout to-day to Europe), "It's your money we want; not your goods." And what is more, they took steps in the way of tariffs to see that the export of goods was made impossible.

Now that was not a mere incident at which we can afford to smile. The confusions—the old, the everlasting, the agelong confusions—have for a decade rendered impossible economic world settlements which otherwise would have been made long since; they shattered for a time the economic fabric of Central Europe; condemned millions to death, and, linked to the Nationalisms that rampage as violently as ever, may yet destroy European civilization.

And here is the tragedy: The confusion which engenders these disorders is one which would not entrap a savage whose mind had not been bemused by the money illusion. A negro from equatorial Africa, accustomed to think of wealth as goods—things to eat, or use, or wear, rare food, fine clothing, jewelry for adornment—would not dream of saying to a rival tribe: "You shall deliver us all that wealth; but no goods must come from your territory into ours."

The confusion is for many reasons less excusable in the case of the modern man than in the case of the medievalist. We have been asking for "money." Germany has no gold mines. The amount of gold that she has or had is well known. The whole of it, every

ounce, did not amount to one-tenth of what we were demanding. What of the other nine-tenths? We still say, "Money." Paper marks? What should we do with them? They are no use except within Germany itself. If Germany delivered them, all we could do would be to send them back to Germany for goods. But the goods must not come into our country!

Many years before the War this present writer urged that the payment by a defeated nation of any indemnity commensurate with the cost of a modern great war, would be impracticable because the innate Mercantilist way of thinking of the ordinary man, in our present state of general economic education, would make it impossible for any government to organize the payments in the only way in which they could be made. The suggestion was then—now more than twenty years ago—met with vast derision. I do not believe there was a single economist at that time who would admit the validity of this argument. Its author was accused of being the victim of Protectionist fallacies, and much else. Eminent economists in reply to the argument outlined plans by which the cost of a modern war could "easily" be paid by the vanquished to the victor. The odd score of Commissions which for the last ten years have wrestled with this problem would to-day doubtless be grateful for the revival of some of those plans so confidently put forward. Their authors seem diffident.

This present writer was not thinking, when he ventured to forecast the difficulty of organizing the vast payments of one state to another occasioned by the cost of modern wars, in terms of Protectionist prepossessions. He was thinking in terms of popular psychology dominated by the Mercantilist assumptions, and it is that fact which, mainly, has stood in the way of settlement. Economists have a curious hesitancy in admitting the extent or depth of this feeling. They seem to attribute to the ordinary busy layman something of their own clarity of thought on this subject. The layman to-day thinks pretty much as the layman of Mercantilist Europe thought four or five centuries ago. I have heard a score of educated

men these last years make statements equivalent to one made in my hearing at Paris during the Peace negotiations: "If the theorists would leave the matter to me I would soon settle it. Give me a dozen lorries and a bombing squadron and within three days I would load those lorries in Berlin with the sums due and have them here in Paris in a week."

M. Tardieu, the French Cabinet Minister (and Clemenceau's political lieutenant in the Treaty framing), warns Englishmen in the London *Times* (July 3, 1920) that *unless* Germany is crippled by a vast indemnity she will become too redoubtable a competitor in the field of foreign commerce. The present writer noted at the time:

> The main problem of an indemnity is to secure wealth in exportable form which will not disorganize the victor's trade. Yet so obscured does the plainest fact become in the murky atmosphere of war time that in many of the elaborate studies emanating from Westminster and Paris, as to "What Germany can pay" this phase of the problem is not even touched upon. We get calculations as to Germany's total wealth in railroads, public buildings, houses, as though these things could be picked up and transported to France or Belgium. We are told that the Allies should collect the revenues of the railroads; the *Daily Mail* wants us to "take" the income of Herr Stinnes, all without a word as to the form in which this wealth is to *leave* Germany. Are we prepared to take the things made in the factories of Herr Stinnes or other Germans? If not, what do we propose that Germany shall give? Paper marks increased in quantity until they reach just the value of the paper they are printed on? Even to secure coal, we must, as we have seen, give in return food.
>
> If the crux of the situation were really understood by the memorialists who want Germany's pockets searched, their studies would be devoted *not* to showing what Germany might produce under favorable circumstances, which her past has shown to be very great indeed, but what degree of competitive German production Allied industrialists will themselves be ready to face.[12]

So strong was the popular Mercantilism that the English Press was afraid, in its desire not to run counter to popular feeling, to challenge it. A year or two later than the date of the criticism just quoted appears this:

The most powerful section of our Press has consistently done its best t keep from its readers the one fact which in the interest of European peace i was necessary to impress upon them. Many aspects of the economic proble in Europe are obscure and difficult. This crucial point is clear and simpl We want Germany to pay a certain large sum; she can only do so by greatl expanding her foreign trade. In what lines of foreign trade are we read to accept such expansion? In steel rails, or motor cars, or cutlery, or doll eyes, or hairpins, or fabric gloves? Coal? We know already what the effe of even a little "indemnity coal" has been. Food, raw materials? German must import them to live. Fertilizers? She could not pay by that mean one-hundredth part of the sums demanded. When she extends her nitrat factories we get fits, because she is increasing her capacity to manufactur explosives. The very people demanding these great sums would be the ver people who would be the first to refuse the one condition upon which Ge many could perform what we ask. Months before the signature of th Treaty the Germans put this question to the Allies: In what lines woul the Allies facilitate the expansion of German trade? When finally Rathena managed to get the Wiesbaden agreement accepted, and France agreed t take certain payments in kind, that document remained a dead letter owin to the hostility of French industrial interests. Germany was ready to "pay" we and France made payment impossible, and the whole time threatene invasion because Germany refused to pay and was "evading the issue." W blame France over the Wiesbaden business. But are we any better? The ve members of the House of Commons who insisted upon astronomical figur in the indemnity are those who would not even hear of Germany sendi small quantities of fabric gloves into the country.[13]

Mr. Spender, the eminent English journalist, gives simil testimony:

Is it really necessary that the whole world should be kept in suspense ar its trade paralyzed by maintaining vast claims which all instructed me know cannot be met, and, if they could be met would be rejected by t claimants? Must we go on, year after year, verifying from costly experien what has now become self-evident? There was some excuse for ignorance 1919. The idea of vast payments being made from one nation to others was new one to the modern world, and the small sum exacted from France aft the Franco-German war offered no analogies.

American economists of the time are even more emphatic. Wh they have to say bears just as much upon the problem of the payme

of Europe's debts to America as upon Germany's payments to the Allies. A typical declaration is that of Professors Bass and Moulton of the University of Chicago, who in their "America and the Balance Sheet of Europe" (p. 335), write:

> What hope is there for the world so long as the leading Premiers of Allied countries admit that Germany can pay only with goods which none of the Allied nations are willing to receive, and give support to their Parliaments in framing tariff measures designed to prevent German exports, at the same time insisting that the recalcitrant Germany must meet the reparation obligation to the last farthing and the last sou? What hope is there for the world so long as most of the leading students of international finance and economics, who recognize the fundamental illusion in reparations and Allied debts, will frankly discuss the subject only in undertones and in inner offices? What hope is there for the world when statesmen and financiers alike, while lacking the courage to tell the truth about reparations and inter-Allied debts, insist that nothing can be done as a practical matter, 'however desirable it might be from an economic point of view,' because the people will not be satisfied to give up the supposed advantages of reparations and debt payments? If ever there was a time for leadership in a campaign of enlightenment on the fundamentals of international economics, it is now. If ever there was a time when the truth is needed to set men free, it is now. If ever there was a time when evasion and concealment were political virtues, it is *not* now.

That warning, be it noted, is as applicable to America as to Europe. America faces normally a situation in which a public opinion, still too considerable to be challenged by politicans or Press, demands integral payment by Europe, and, at the same time, a tariff so designed to keep out European goods that payment cannot be made.

Just recently the Mercantilist prepossessions have cropped up in a new form in the agitation against American loans to Europe. Mr. John Foster Dulles (Counsel to the American Commission to Negotiate Peace) in referring to this matter described a typical cartoon:

> It showed the interior of a restaurant. The American banker was portrayed as a waiter. His itching palm had been well satisfied. He was serving a luscious and heavily frosted cake to a guest who was denominated "Europe."

The cake was labeled "$13,000,000,000." The picture showed emaciated an tattered figures outside the restaurant pressing their wan and pathetic face against the window. These figures were our agricultural and irrigatio projects.

What precisely, asks Mr. Dulles, is that money, that $13,000 000,000? Not gold, because we have more gold now than when w started to loan. Has it gone in the form of currency? Hardly because the amount is twice the entire currency of the Unite States. And if it went abroad, where is it? "A good many of u go abroad and we do not see any signs of 13,000,000,000 America dollars lying around Europe. It is a lot of money. It is many time the combined currency circulation of England, France, and Ger many. It could not be readily concealed. And, indeed, one ma wonder what object European and other foreign nations would hav in paying high-interest rates to borrow dollars to be shipped abroa by the ton."

Mr. Dulles goes on to show that that vast sum goes in the form c American goods exported abroad. There can be no doubt about it this money is goods and nothing else. America is lending foreigner money wherewith to pay for American goods. "The net result c the situation is that Europe has had to borrow the difference betwee the $47,000,000,000 of exports and the $36,000,000,000 of import That difference is $11,000,000,000 and $11,000,000,000 is precisely th amount of foreign securities which our bankers have sold durin the nine-year period."

It is not due to some extraordinary coincidence that this nic balance is attained, he adds. "It is inevitable that it should be so because foreign borrowing is the balance figure in the internationa balance sheet. Nations borrow from one another as they requir foreign money to pay for goods or to pay debts. If the internationa balance sheet can be balanced without borrowing there will be n borrowing. If you eliminate borrowing, it is humanly impossibl to make the two sides balance unless either you reduce our ex ports or increase our imports, or ease the dollar requirement b

eliminating the service on debt, as for instance the Allied War debts."

The point is: Would the objection to our "sending all this money out of the country" be as intense as it is if the cities realized that the "money" is in fact cotton and oil and typewriters and motor cars sold abroad? Hardly, for as Mr. Dulles himself points out:

> It is an extraordinary thing that, as a practical matter, the most violent critics of our foreign lending are the same people who want us to have gigantic exports, who want to maintain a high protective tariff to keep out imports, and who insist upon the collection of war debts to the last penny. It cannot be done. You have got to have a balance between those factors, and so long as we have a national policy of promoting exports, of protecting our industry by a high tariff, of full collection of debts—so long as we have such a policy and the basic economic conditions remain substantially as they are to-day—so long must we finance our exports very largely through the medium of loaning foreigners the money wherewith to pay for them.[14]

Incidentally, many, including in the past Mr. Hoover, have suggested that the loans still being made to Europe, never can be repaid. At a meeting of bankers some years ago Mr. Hoover said:

> Even if we extend these credits and if upon Europe's recovery we then attempt to exact the payment of these sums by import of commodities, we shall have introduced a competition with our own industries that cannot be turned back by any tariff wall. . . . I believe that we have to-day an equipment and a skill in production that yield us a surplus of commodities for export beyond any compensation we can usefully take by way of imported commodities. . . . Gold and remittances and services cannot cover this gulf in our trade balance. . . . To me there is only one remedy, and that is by the systematic permanent investment of our surplus production in reproductive works abroad. We thus reduce the return we must receive to a return of interest and profit.

Mr. Hoover disposes of the principal of the foreign loans. The debtors cannot return it and Americans cannot afford to receive it back. But the interest and profit which he says Americans can receive—that will have to be paid in commodities, as the principal

would be if it were paid at all. "What shall we do," asks a commentator at the time, "when the volume of foreign commodities received in payment of interest and profit becomes very large and our industries cry for Protection?"

As related to this subject of the hypnotizing influence of money or gold and the obsessions to which it gives rise, a few paragraphs have been added to this chapter on the old-time search of the alchemist for the philosopher's stone that would make gold and so give the world wealth. For several reasons that phenomenon of the alchemist's search—the literary interest in which has recently revived—has a certain bearing on the problems we are considering.

Our age looks back with amused contempt on many beliefs earnestly cherished by the men of a former time. We pass by witchcraft and magic, no less than judicial astrology and alchemy, with a superior smile. Yet there has been no great change, as a recent writer on this very subject of alchemy points out, in mental capacity during historic time. "The claims put forward by adepts in these occult arts were accepted, in former ages, by many who were wise and good and learned. We may be sure that their understanding were no feebler than ours. But their acceptance of what we reject does represent something fundamentally different between their outlook and ours." To understand that difference may help us perhaps not to fall into similar errors in other fields than alchemy.

There was one theory, as the anonymous writer just quoted points out, that separated the science of the alchemists from that of our own day. "The whole of alchemical writing is saturated—we should now say contaminated—by the constant use of the method of analogy. . . . A modern man of science habitually uses analogy as a guide to experiment, but he never adduces it as a proof of its conclusions. In setting forth his results he usually emphasizes his inductive proofs and buries deep, among the débris of his abandoned working hypotheses, the memory of the analogical processes

that he had used. Not so the medieval thinker. It is a very characteristic product of medieval thought. It pervaded the whole of alchemy."

Now it is at least suggestive that the whole Mercantilist doctrine, medieval and modern alike, is shot through and through with false analogies. Never a writer urging the importance of securing treasure but points out that just as a good merchant must always sell more than he buys, and is rich if he has plenty of money, so a nation must be guided by like rules. But on examination the analogy breaks down completely. No individual would be rich if he were not allowed to exchange any of his money for food and shelter. Yet the Mercantilist laws were designed to have the individual (nation) acquire money and then be prohibited from exchanging any of it for commodities. He had to "live on himself," and not go outside his own body for what he needed. Money is a means of wealth if you can exchange it for wealth: that is the means by which it becomes wealth. But to give some one money and then impose the condition that he must never spend it, is to deprive it of its function. He might as well not have it.

The modern emphasis upon Nationalism has caused this analogy between person and nation to be pushed further still. We talk of Britain's trade or Germany's trade, and of the one as being in opposition to the other, as though they were two shopkeepers in competition. But "Britain" and "Germany" are political, not economic units; rather more completely a political unit than Pennsylvania or Massachusetts, but hardly more so economically, except with certain narrow limits affected by currency standard and tariffs. The trading does not take place as between the nations. A trading corporation called "Britain" does not buy cotton from another corporation called "America", any more than a corporation called "Pennsylvania" buys from another called "Massachusetts." A manufacturer in Manchester strikes a bargain with a merchant in Louisiana in order to keep a bargain with a dyer in Germany, and three or a much larger number of parties enter into virtual, or perhaps

actual, contract, and form a mutually dependent economic com
munity (numbering it may be, with the work people in the grou
of industries involved, some millions of individuals)—an economi
entity, so far as one can exist which does not include all organize
society. The special interests of such a community may becom
hostile to those of another community, but it will almost certainl
not be a "national" one, but one of a like nature, say a shipping rin
or groups of international bankers or Stock Exchange speculators
The frontiers of such communities do not coincide with the area
in which operate the functions of the political state. How could
state, say Britain, act on behalf of an economic entity such as tha
just indicated? By action against America or Germany? But th
community against which the British manufacturer in this cas
wants action taken is not "America" or "Germany"—both Amer
cans and Germans are his partners in the matter. He wants
exercised against the shipping ring or the speculators or the banke
who belong to all three nations.

In another connection the present writer has put a case thus:

> When the prosperity of an average German factory is distributed pret
> evenly over some such factors as these: the capacity of a peasant in Proven
> who sells his olives in New York to subscribe to a South American loan,
> order that a dock might be built on the Amazon to enable the manufactur
> in Manchester to sell furniture in Baku to a merchant whose wealth is d
> to the development of petrol consumption in an automobile trade created
> Paris—in a world where business is done in such conditions as these, we a
> told that the limits of commercial or industrial activity are determined by t
> limits of political influence, and that there exists some direct relation betwe
> political power and economic advantage! And we are still told it even wh
> the prosperity of powerless states gives it the lie.

It never occurs to us to talk of the trade of Michigan being
competition with that of Illinois because we don't think of them
economic units. But we do so think of European states. Y
despite the tariff barriers they are hardly more so.

Without this conception of nations as entities, persons, the Me

antilist policies would not have arisen, because before we can talk f keeping the gold to "ourselves" and taking it away from the others," we must have a sense of who is ourself and who is the ther. Those distinctions, incidentally, are conditioned, not by conomic, but Nationalist considerations. Americans think of the vhole of the United States as "ourselves" and the Pennsylvanian or ouisianian does not think of money going outside his state borders s going "abroad." If ever European peoples should get into the abit (which they had once and may get again) of thinking of hemselves as "Europeans," if, in other words, the categories and nalogies should alter a little, there would be a very profound conomic revolution. But in that case it would not be due merely or ainly to economic causes but to a change in certain ideas which are ie fruit of just the sort of "analogy thinking" to which the historian f alchemy above quoted has referred.

Before we leave the question of Bullionism and Mercantilism, it vould be interesting perhaps to indicate the lines along which the octrine is defended. It need hardly be said of course that the ccumulation of a reserve of treasure for use in times of emergency ke war, is a perfectly rational and defensible measure (for in that ase the bullion is accumulated with the idea of spending it when ie occasion shall call for it). But there are modern writers who efend the accumulation of bullion by a state as an end in itself, not ith a view to later expenditure but to be kept as a thing valuable t itself quite apart from anything which it may procure when used s a medium of exchange.

The most notable of these defenders is William Carlile, who in his Evolution of Modern Money" makes an argument, not always ear, which seems to run along these lines:

> Of course bullion of itself is useless, but men desire useless things because they confer distinction. Men are not actuated by "utility" but a desire to outshine neighbors, and that is true of nations as well, and they want to have the feeling of su-

periority which the possession of plenty of money, whether it can be turned into goods or not, gives.

"The conception of money as being in the world of to-day," he writes, "like gold and silver among early peoples, sought after so largely on account of the distinction that the possession of it confers, if regarded as valid, will make it necessary for us to revise much that has been held to be the soundest of sound doctrine in the current political economy. It may make us less disposed than we have hitherto been to cast aside as worthless all the reasonings and investigations of our forefathers in the period antecedent to Adam Smith."

He admits in some measure the validity of the anti-Mercantilist argument:

"We in England at any rate had come to recognize the truth that money was not in any real sense wealth at all; it was a mere tool for the transference of wealth; 'it was of no use till it was spent'; neither man or nation could be enriched by its increased acquisition; all that men really wanted was more and cheaper commodities. Consequently the whole benefit of international trade to any country lay, it was said, in its imports, and a balance of exports over imports meant nothing but national loss."

All that he admits, but he goes on:

The validity of these doctrines might be taken for granted by the studen when he found them within the boards of his text-books, but the remarkabl thing was that he was likely to find them nowhere else. In all current liter ature, in all common talk, he would on the contrary find it taken for grante that what every one who engaged in business at home, as well as every on who went to push his fortune abroad, was aiming at was the making o money in the old-fashioned sense in which making money is synonymou with acquiring the ownership of gold. More than this, if we look at th fiscal policy of modern nations, if we regard the practical considerations th recommend one line of policy in preference to another, we find that the go that they have one and all before them is nothing else but the goal of th nations in the days of the Mercantile Theory, nothing else but the goal o the Mercantile Theorists themselves, the acquisition of the maximum degr

of command over the medium of exchange for the nation itself as a body, and severally for the units that compose it.[15]

His argument is at bottom a psychological one:

We have to recognize in the creation of wealth, as in everything else throughout the whole sphere of life, the operation of a double purpose—the purpose of instinct and the purpose of reason . . . the fanciful and the frivolous occupy a greater share in the moulding of human destinies than our too prosaic economical science is accustomed to allow to them. . . .

Mr. Mill remarks somewhere with point and truth, that, if we reflect what it is that we are all really striving after, once the necessities of the body have been satisfied, we shall find that it is, in one shape or another, the favourable opinion of those about us.

The possession of gold he thinks achieves this, and gives a feeling of power:

There is the same distinction in economics between money and commodities that there is in physics between energy and work. It is to increase their potential energy, that is, their reserve of purchasing power, that the aspirations, both of men and nations are directed.

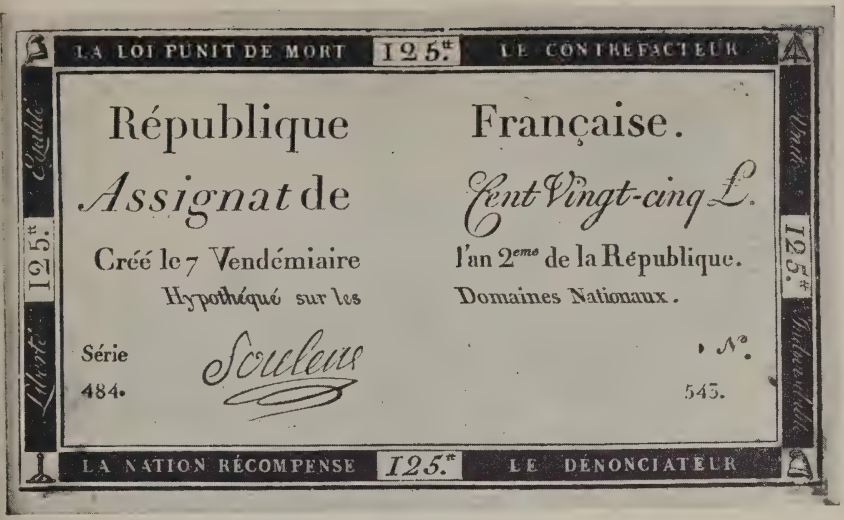
But those who have followed in recent years the movement of gold between nations will find it difficult to reconcile the above with the simple facts. The relation of the possession of redundant gold to price levels and potential inflations, and fear of the competitive power of nations with lower price levels, introduce a group of motives which in actual fact outweigh in the commercial world of to-day the considerations the above writer invokes.

The hypnotism exercised by the precious metals in the economic thinking of the Renaissance provoked a curious revival of the alchemists' attempts to transmute the base metals into gold. The search had gone on intermittently for three thousand years and it does not seem to have occurred to any one that success in the discovery would have rendered it nearly valueless. For if the particular philosopher had found his philosopher's stone with the intention of

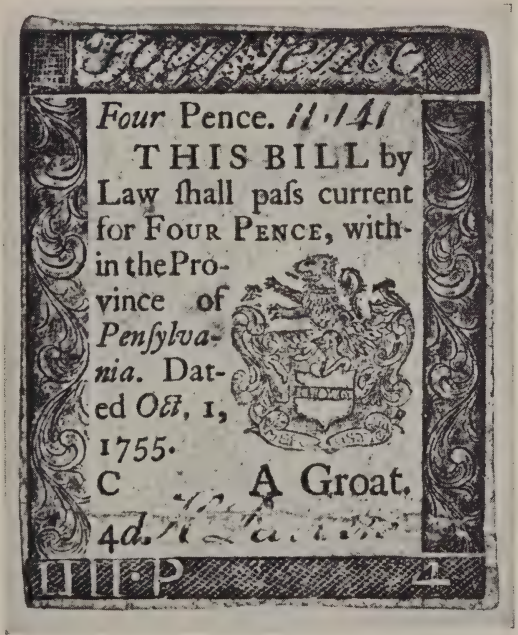
keeping the secret to himself it is pretty certain that some needy monarch would have caught him and subjected him to the sort of thing which as a matter of fact monarchs occasionally did subject alchemists. There are some grim details in one or two of the Fugger letters. Writing from Prague (14th of May, 1591) the Fugger agent records:

"The English alchemist, who has recently been taken to Purglitz as a prisoner, appeared to be in the depths of despair these latter days and refused to partake of food, so that it was feared that he might die. But he has since recovered. His Imperial Majesty has ordered a doctor and a councillor of the Court to proceed to him, in order to examine him. Various other officers were also sent with orders to extract information, if need be, by torture." And a few weeks later another reference: "The English alchemist is reported to have been immured at Purglitz. He is to have no air, but that which comes through a hole, through which he can reach for his food bit by bit. It is feared that it will be done with him as with the alchemist at Munich. On examining the accounts of Rosenberg it was found that the Englishman had cost him over three hundred thousand florins. It is amazing that these noblemen have allowed themselves to be duped in such fashion. He is said to have cost the Emperor near on a thousand Rhenish guilder." [16]

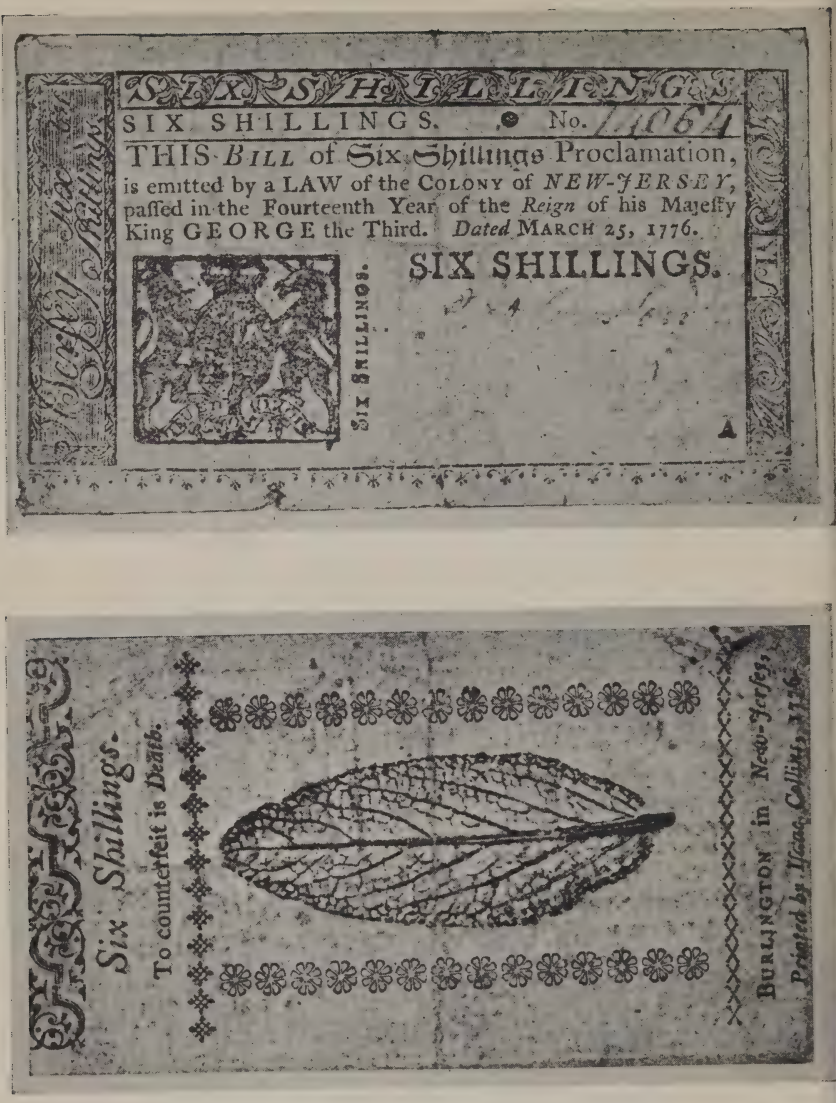
The study of transmutation originated among the ancient Egyptians, and was modified and developed by the Greeks and Romans. Among the many thousands of books which appeared on the subject were some by such scholars as Pythagoras, Democritus and Hermes, and at one time the craze was so prevalent that the emperor, Diocletian, about A.D. 296, issued an edict in Egypt committing to the flames "all the ancient books which treated of the admirable art of making gold and silver," apprehensive, as we are assured, "lest the opulence of the Egyptians should inspire them with confidence to rebel against the empire." [17] Another Roman emperor, Caligula, was himself an enthusiast, and instituted experiments for the production of gold from arsenic.


LA LOI PUNIT DE MORT 125.ts LE CONTREFACTEUR
République Française.
Assignat de Cent Vingt-cinq L.
Créé le 7 Vendémiaire l'an 2eme de la République.
Hypothéqué sur les Domaines Nationaux.
Série 484.
Souleus
N°. 545.
LA NATION RÉCOMPENSE 125.ts LE DÉNONCIATEUR

French Assignat of the second year of the Republic.


Four Pence. 11·141
THIS BILL by Law ſhall paſs current for FOUR PENCE, within the Province of Penſylvania. Dated Oct. 1, 1755.
C A Groat.
4d.
IIIP

Pennsylvania note for one groat (four pence) 1755.


SIX SHILLINGS.
SIX SHILLINGS. No. 1064
THIS BILL of Six Shillings Proclamation,
is emitted by a LAW of the COLONY of NEW-JERSEY,
passed in the Fourteenth Year of the Reign of his Majesty
King GEORGE the Third. Dated MARCH 25, 1776.
SIX SHILLINGS.
SIX SHILLINGS.
Six Shillings.
To counterfeit is Death.
BURLINGTON in New-Jersey,
Printed by Isaac Collins, 1776.

New Jersey note for six shillings, 1776. (The tobacco leaf appearing on this note indicates the rôle of tobacco as currency in the Colonies.)

From the very earliest days the hopes of alchemists centered round he mixing of mercury, sulphur, and arsenic. Many philosophers hought that these were the three chief chemical elements; the Arabians held that all metals were composed of sulphur and mercury n varying proportions.

Even Roger Bacon, father of English science, who discounted nagic, charms and astrology, believed in the possibility of transmu- ation. He is said to have declared that with a certain amount of he philosopher's stone he could transmute a million times as much netal into gold. He was succeeded by a group of distinguished lchemists which included Pope John XXII, and Raymond Lully, vho introduced the use of chemical symbols.

The art found its grand master in Paracelsus, a Swiss chemist of he early sixteenth century. Paracelsus believed that all matter was omposed of either salt, sulphur, mercury, or water, but if a fifth lement could be isolated it would be the philosopher's stone, and vould not only transmute metals but cure all diseases. Later in life ie announced that he had found the stone, and claimed to have ffected extraordinary cures.

After his death the alchemists divided into two groups, one levoting itself to serious scientific research and making many aluable discoveries, the other, exploiting the visionary and astrologi- al side of the art, plunged deeper and deeper into extravagant nysticism and founded the Rosicrucians and other secret societies.

Belief in the possibility of transmutation long remained orthodox, even among the most distinguished men of science. Thus it was ccepted, at least academically, by Andreas Libavius (A.D. 1616); by F. de la Boe Sylvius (1614-1772), though not by his pupil Otto Tachenius, and by J. R. Glauber (1603-1688); by Robert Boyle (1627-1691) and, for a time at least, by Sir Isaac Newton and his ival and contemporary, H. W. Leibnitz (1646-1716); and by G. E. Stahl (1660-1734) and by Herman Boerhaave (1668-1738). Though n alchemist, Boyle, in his *Sceptical Chemist* (1661), cast doubts on he "experiments whereby vulgar Spagyrists are wont to endeavour

to evince their salt, sulphur, and mercury to be true principles o things."

Perhaps J. B. van Helmont (1577-1644) was the last distinguishe investigator who professed actually to have changed mercury int gold, though imposters and mystics of various kinds continued t claim knowledge of the art long after his time. So late as 178 James Price, an English physician, showed experiments with whi and red powders, by the aid of which he was supposed to be able t transform fifty and sixty times as much mercury into silver and gol The metals he produced were said to be genuine on assay; whe however, in the following year he was challenged to repeat th experiments he was unable to do so and committed suicide.

CHAPTER VIII

MONEY LENDING, THE CHURCH AND THE JEW

The great antiquity of the view which regarded the loaning of money r interest as a crime. While the economical analysis involved in these leas was defective, the ethical intention was sound and the practical sults in the protection of simple folk often good. The gradual aban- nment of the ban on usury was accompanied by a gradual change in e way men looked at the relation of ethics or religion to trade. The lation of the Reformation to the growth of Capitalism. The special osition of the Jew in these developments and the antiquity of his spe- alization in finance.

CHAPTER VIII

MONEY LENDING, THE CHURCH AND THE JEW

One of the greatest events in the story of money is the change of ethical attitude in reference to loans, and interest thereon, and all that ecclesiastical ruling on such a matter implies. We find it difficult to-day to realize that for long ages nearly all the great moralists and teachers, nearly all the great religious bodies, including the Roman Catholic Church, condemned the charging of interest as a vile crime comparable only to murder. It was no casual or incidental condemnation with which the Church—and for centuries the secular state as well—visited this offense. Its heinousness has been the subject of a vast literature; of disputations carried on ardently from generation to generation, and age to age.

The fact that we have changed so completely our attitude on this point, means a great deal more than that we have changed an opinion upon the morality of some detail of commercial practice. It means for good or ill a change in the part which religious and moral sanctions play in our lives.

Let us glance at the outstanding facts in this ethical and economic evolution.

In Webster's dictionary (1897) "usury" is defined as

> A premium or increase paid, or stipulated to be paid for a loan, as of money; interest. And the following note is added:
>
> The practice of requiring in repayment of money lent anything more than the amount lent, was formerly thought to be a great moral wrong, and the greater the more was taken. Now it is not deemed more wrong to take pay for the use of money than for the use of a house or any other property. But the lingering influence of the former opinion, together with the fact that the nature of money makes it easier for the lender to oppress the borrower, has caused nearly all Christian nations to fix by law the rate of compensation

for the use of money. Of late years, however, the opinion that money shoul be borrowed and repaid, or bought and sold, upon whatever terms the parti should agree to, like any other property, has gained ground everywhere.

Ehrenburg, in his "Capital and Finance in the Age of the Renai sance," [1] tells us that the first principle "which for many centurie ruled undisputed in theory and even attempted to bring practic under its sway" has been formulated in the five words: *"Pecun pecuniam non parere potest."* Money is essentially unproductiv Any one, therefore, who demands fruits from it, sins not only again positive commandments of divine and secular law, but also again the nature of things.

"On the iniquity of payment merely for the act of lending, the logical opinion, whether liberal or conservative, was unanimous, an its modern interpreter, who sees in its indulgence to *interesse* th condonation of interest, would have created a scandal in theologic circles in any age before that of Calvin," says R. H. Tawney in h "Religion and the Rise of Capitalism." "To take usury is contrary t Scripture; it is contrary to Aristotle; it is contrary to nature, for it to live without labor; it is to sell time, which belongs to God, fo the advantage of wicked men; it is to rob those who use the mone lent, and to whom, since they make it profitable, the profits shoul belong; it is unjust in itself, for the benefit of the loan to th borrower cannot exceed the value of the principal sum lent him; is in defiance of sound juristic principles, for when a loan of mone is made, the property in the thing lent passes to the borrower, an why should the creditor demand payment from a man who merely using what is now his own?" [2]

The part played by authority in all this is obvious. There we the Mosiac Law texts in Exodus and Leviticus; in the New Test ment (as Luke VI. 35). It was common to quote Aristotle's arg ment based on the fact that the Greek word for "interest" mea child, as if to say that interest was the child of principal. Coin ca have no progeny. Therefore, he urges, money derived from the lo of money is an unnatural acquisition (Politics I, x, 4, 5). Cicero

uoted in his references to Cato Major who took pains to point out hat the usurer was branded by the Roman law as a greater evil than he common thief, and he made the dishonesty of loans sufficient rounds for declining them as investments. Indeed, Cicero makes im avow that "usury is a form of homicide."

This is not merely medieval opinion. The sixteenth-century Bishop Jewel quoted by Ruskin in "Fors Clavigera" [3] is typical of nuch of the religious opinion of that actively commercial time, vhen he writes:

> Usury is a kind of lending of money, or corn, or oil, or wine, or of any ther thing, wherein, upon covenant and bargain, we receive again the whole rincipal which we delivered, and somewhat more for the use and occupying f the same: as, if I lend one hundred pounds, and for it covenant to receive ne hundred and five pounds, or any other sum greater than was the sum vhich I did lend. This is that that we call usury; such a kind of bargaining s all men that ever feared God's judgment have always abhorred and con- emned. It is filthy gains, and a work of darkness: it is a monster in nature; he overthrow of mighty kingdoms; the destruction of flourishing states; the lecay of wealthy cities; the plagues of the world, and the misery of the eople. It is theft; it is the murdering of our brethren; it is the curse of God, and the curse of the people.

And indeed we may recall the view of Ruskin himself:

> The moment our capital is "increased," by having lent it, be it but in the stimation of a hair, that hair's breadth of increase is usury, just as much s stealing a farthing is theft, no less than stealing a million;
>
> But usury is worse than theft, insofar as it is obtained either by deceiving eople or distressing them; generally by both: and finally by deceiving the isurer himself, who comes to think that usury is a real increase, and that noney can grow of money; whereas all usury is increase to one person only y decrease to another; and every gain of calculated increment to the rich, s balanced by its mathematical equivalent of decrement to the poor.

This was written in 1876.

Before we dismiss these older views on usury with an impatient gesture, we may as well remember their antiquity, and recall the ircumstances in which they arise.

The trouble antedates money, and was rampant by the time tha money had become of common use in Greece and Rome.

"It is worthy of remark," says Grote (History of Greece, iii, 144) "that the first borrowers must have been for the most part me driven to this necessity by the pressure of want, and contracting deb as a desperate resource without any fair prospect of ability to pay debt and famine ran together in the mind of the poet Hesiod. Th borrower is in this unhappy state rather a distressed man solicitin aid than a solvent man capable of and fulfilling a contract, and if h cannot find a friend to make a free gift to him in the former h would not under the latter character obtain a loan from a strange except by the promise of exorbitant interest and by the fulle eventual power over his person which he is in a position to grant. This does not apply merely to the state of society of ancient Greec It would be as applicable to modern India; to most peasant state The small agriculturist—and early Greece, early Rome, India an China so long as we have any knowledge thereof at all represent world of small agriculturists—is not in the same position in respe of the use of credit as the modern business man. Small peasa borrowers are not induced to borrow as a rule with the view employing the capital so obtained at a greater profit, but compelle of necessity to borrow as a last resort. In ancient Greece we find law of bankruptcy resting upon slavery. In Athens about the tim of Solon's legislation (594 B.C.) the bulk of the population, who ha originally been small proprietors or metayers, became gradually i debted to the rich to such an extent that they were practically slav

Rome found the same difficulties. "As in Athens in early time the mass of the people were yeomen, living on their own sma estates, and in time they became hopelessly in debt." The legisl tion of the twelve Tables, about 500 B.C., was intended to strike the evil by providing a maximum rate of interest. The attempt regulate the rate of interest failed as such attempts nearly always d "In the course of two or three centuries the small free farmers we utterly destroyed," says one authority,[4] who goes on: "By the pr

sure of war and taxes they were all driven into debt, and debt ended practically, if not technically, in slavery. It would be difficult to overestimate the importance of usury on the social and economic history of the Roman republic." In the provinces the evils of the system reached a much greater height than in Rome. The old law of debt was not abolished until the dictatorship of Julius Cæsar, who practically adopted the legislation of Solon more than five centuries before; but it was too late then to save the middle class. About this time the rate of interest on first class security in the city of Rome was only about 4 per cent, while in the provinces from 25 to 50 per cent was often exacted. Justinian made the accumulation of arrears (anatocismus) illegal, and fixed the rate at 6 per cent except for mercantile loans, in which the rate received was 8 per cent.

When we thus read of the attempts of Greek and Roman statesmen to deal with money in their peasant or farmer areas, we might be reading of the efforts of Indian administrations to deal with that evil to-day.

It seems clear that the whole body of intellectual assumptions and practical interests, on which the prohibition of usury was based, had reference to a quite different order of society from that represented by the modern commercial world. "Its object," as Tawney points out, "was simple and direct—to prevent the well-to-do money-lender from exploiting the necessities of the peasant or the craftsman; its categories, which were quite appropriate to that type of transaction, were those of personal morality." It was for them that the Church's scheme of economic ethics had been worked out, and with reference to them, though set at naught in high places, it was meant to be enforced, for it was part of Christian charity.

In an earlier chapter of this book it is pointed out that one of the difficulties of primitive man in engaging in exchange at all, whether by direct barter or by the use of money, arose out of a logical problem. If the other party to the exchange desires to get rid of what he possesses in exchange for what I have, it must be because what he has is worth less than what I have; otherwise he would not

desire the exchange. In that case he is robbing me; and if I benefit, I must, by the same order of reasoning, be robbing him; and exchange or trade is therefore an unethical process, and the medievalist made no bones about saying that it was. Most medieval philosophy condemned all commerce as the sphere of iniquity, however such condemnation might be softened by a recognition of practical necessities.

Some distinctions, it is true, were made, and R. H. Tawney, among others, has sketched them for us. The craftsman labors for his living; he seeks what is sufficient to support him, and no more. The merchant aims not merely at livelihood, but at profit. The traditional distinction was expressed in the words of Gratian: "Whosoever buys a thing, not that he may sell it whole and unchanged, but that it may be a material for fashioning something, he is no merchant (*i.e.,* is exempt from condemnation.) But the man who buys it in order that he may gain by selling it again unchanged and as he bought it, that man is of the buyers and sellers who are cast forth from God's temple." By very definition a man who "buys in order that he may sell dearer," the trader is moved by an inhuman concentration on his own pecuniary interest, unsoftened by any tincture of public spirit or private charity. He turns what should be a means into an end, and his occupation, there, "is justly condemned, since regarded in itself, it serves the lust of gain." [5]

When to the confusions involved in these assumptions is added "the money illusion," the habit of looking upon money, not as a mere representation of other things, as a token of goods or services due, a means of bookkeeping, but as a separate and special form of wealth in itself—then confusion indeed becomes worse confounded. To think in terms of goods, real wealth, makes much of the vast literature of usury meaningless.

It is a mortal sin to charge a man for the use of money. But rent—a charge for the use of a house—is entirely moral. A needs a house. You offer to build him one at a cost of ten thousand dollars and charge him six hundred dollars a year rent. That would

have been entirely moral in the terms of the old thought about these things. But A. says: "I would like to build the house myself exactly as I want it. So lend me the money and I will pay you the rent as interest on the loan." That immediately becomes usury, criminal and infamous, and under a thousand old laws would have condemned the person guilty of it to ferocious punishment, imprisonment and sometimes torture.

It was to the old—and ever new—confusion between money and wealth that was due so much of the old usury confusions. There was of course no monetary science at all in the Middle Ages. "It was not until the works of Aristotle became available—at first the *Ethics,* later the *Politics*—that the scholars of this period began to develop any clear ideas about money." [6] Their early attempts were little more than "childish etymologies," as Jourdain expresses it.

Aristotle's theories were taken over without much modification by the early Schoolmen. Albertus Magnus and St. Thomas comment on these passages in Aristotle, without adding anything of note in regard to money. Monroe, summarizing their views, deems that their conclusions as to the influence of money on men's ways were not wholly unfavorable. They note that money is often the end sought in crimes and, believing that the sin of usury is simply a misuse of money, ask whether such a source of evil should not be rooted out.

Exchange, like everything else, is referred to a divine origin. Oresme, who doubtless reflects the ideas of his precursors, if he does not use their words, says exchange arose from the fact that, after God had divided the earth and its goods among the sons of Adam, men and places often found themselves with a surplus or lack of some commodity. Barter was therefore resorted to. There is more in this, Monroe points out, [7] than a mere change in intellectual method. There is some attempt to explain the existence of mutual wants, and to distinguish different sets of causes; not only men but places have surpluses which may be exchanged for the surpluses of others.

As bearing upon the ethical difficulties which arose out of the use of money it may be pointed out that the inequities which arise between debtors and creditors as a result of general changes in prices became so glaring during the debasements of the later Middle Ages that there were many disputes as to what constituted just repayment in such cases. Neither Aristotle nor the Roman Law offered much help to the medieval writers in deciding the question; but the general rule seemed to be that justice was done if the debtor repaid a sum whose legal numerary value was equal to that which he had borrowed. There was no attempt to distinguish between the legal and economic aspects of the question.

But what broke down the prohibition of usury was not development of theory but practical need which simply had to disregard the theory.

Ehrenburg tells us that in spite of the ban of the Church, interest-bearing loans had at the end of the Middle Ages been for centuries an everyday legal transaction. "It was nevertheless regarded as a gross sin. In the Papal indulgences money gained through usury was put on a level with stolen goods. Jurisprudence also held strictly to this view. Whether the 'usurers' themselves, that is the whole body of merchants, had uneasy consciences when they received interest, is not easy to say; but certainly this was true of not a few of them. In the thirteenth century merchants often, or perhaps regularly, directed in their wills that their heirs should restore their gains from usury or should employ them for the salvation of the testator's soul. By the end of the Middle Ages this was no longer a general custom. Even in the sixteenth century, however, it often happened that merchants took a legal opinion as to whether this or that undertaking was permissible under canon law." [8] In the year 1577 an agent of the Fugger in Spain writes of a Genoese Lazaro Doria recently dead: "He was of so ticklish a conscience that he dealt not in bills or commerce against which the preachers and theologians here write and rage."

From a very early date there was a school of opinion which held

that in view of the various strategems by which usurious contracts could be "coloured," as Tawney puts it, direct prohibition was almost necessarily impotent, and which favored the policy of providing facilities for borrowing on more reasonable terms than could be obtained from the money lender. "Ecclesiastics try, in fact, to turn the flank of the usurer by establishing institutions where the poor can raise capital cheaply. Parishes, religious fraternities, gilds, hospitals, and perhaps monasteries, lend corn, cattle and money." [9] In England, bishops are organizing such loans with papal approval in the middle of the thirteenth century, and two centuries later, about 1462, the Franciscans led the movement for the creation of *Monts de Piété,* which starting in Italy, spread by the first half of the sixteenth century to France, Germany, and the low countries, and though never taken up in England—for the Reformation intervened—supplied a topic of frequent comment and eulogy to English writers on economic ethics. The canon law on the subject of money-lending underwent a steady development, caused by the necessity of adapting it to the increasing complexity of business organization, down at least to the Lateran Council of 1515.

Mun, in the tract, "England's Treasure by Foreign Trade," quotes the old saying "that as usury increaseth, so trade decreaseth," but only to disprove it, declaring that, on the contrary, trade and usury rose and fell together. "For although it is true that some men give over trading and buy lands or put out their money to use when they are grown rich or old, or from some other the like occasions; yet for all this it doth not follow that the quality of the trade must lessen, for this course in the rich giveth opportunity for the younger and poorer merchants to rise in the world and to enlarge their dealings; to the performance whereof, if they want means of their own, they may, and do, take it up at interest: so that our money lies not dead, it is still traded. How many merchants and shopkeepers have begun with little or nothing of their own, and yet are grown very rich by trading with other men's money! Do we not know, that when trading is quick and good, many men, by means of their

experience and having credit to take up money at interest, do trade for much more than they are worth of their own stock? By which diligence of the industrious the affairs of the commonwealth are increased, the moneys of widows, orphans, lawyers, gentlemen, and others, are employed in the course of foreign trade, which themselves have no skill to perform."

The literature of the time reveals to us the process by which bit by bit the prohibition was nibbled away. No man may charge money for a loan, but may, of course, take the profits of partnership, provided that he takes the partner's risks. He may buy a rentcharge; for the fruits of the earth are produced by nature, not wrung from man. He may demand compensation—*interesse*—if he is not repaid the principal at the time stipulated. He may ask payment corresponding to any loss he incurs or gain he forgoes. He may purchase an annuity, for the payment is contingent and so speculative, not certain. It is no usury when John Deveneys, who has borrowed £19.16s., binds himself to pay a penalty of £40 in the event of failure to restore the principal, for this is compensation for damages incurred; or when Geoffrey de Eston grants William de Burwode three marks of silver in return for an annual rent of six shillings, for this is the purchase of a rentcharge, not a loan; or when James le Reve of London advances £100 to Robert de Bree of Dublin, merchant, with which to trade for two years in Ireland, for this is a partnership; or when the Priory of Worcester sells annuities for a capital sum paid down. "What remained to the end unlawful was that which appears in modern economic text-books as 'pure interest'—interest as a fixed payment stipulated in advance for a loan of money or of wares without risk to the lender. 'Usura est ex mutuo locrum pacto debitum vel exactum . . . quidquid sorti accedit, subaudi per pactum vel exactionem, usura est, quodcunque nomen sibi imponat.'"[10] The emphasis, says Tawney, was on *pactum*. The essence of usury was that it was certain, and that, whether the borrower gained or lost, the usurer took his pound of flesh. Medieval opinion, which has no objection to rent or

profits, provided that they are reasonable—for is not every one in a small way a profit-maker?—has no mercy for the bond holder. "His crime is that he takes a payment for money which is fixed and certain, and such a payment is usury." [11]

But even this distinction could not be maintained and the Church itself by its daily acts recognized the inevitability of the usurer in that new money economy which had grown up, mainly since the Crusades had helped to open to the West the silver and gold-bearing East. The Crusades, blest by the Church for their religious purpose, had as one of their main results a great extension of the range of commerce and consequently of the money economy and all that went with it.

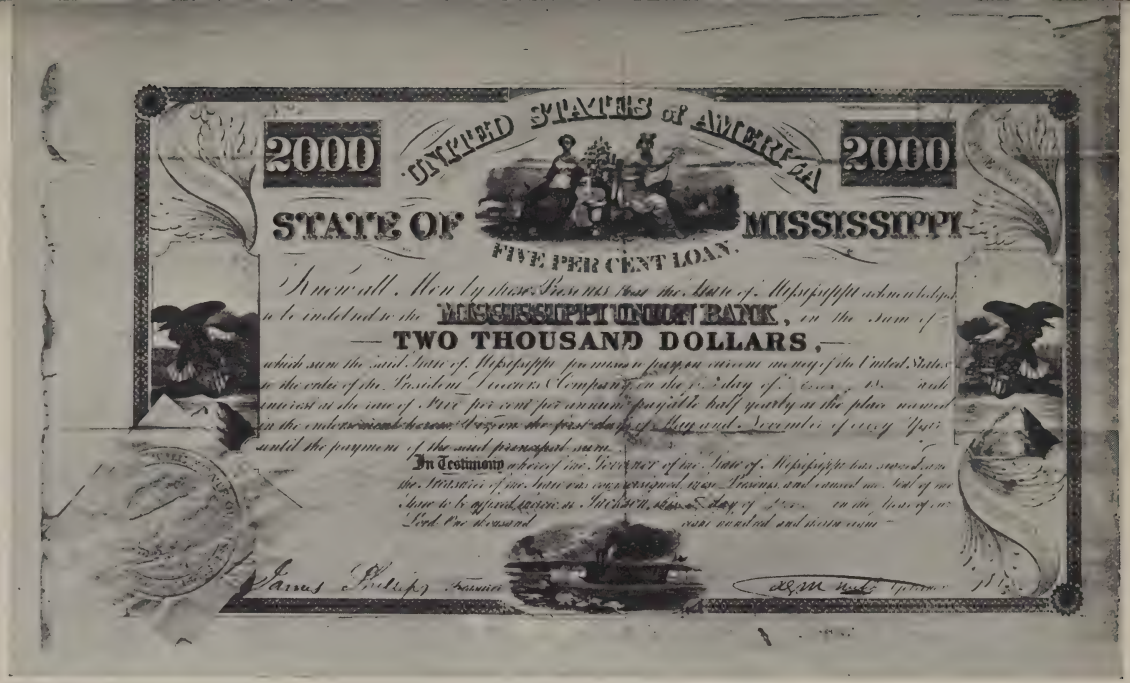
Indeed, the Papacy, receiving remittances from all over Europe, and receiving them in money at a time when the revenue of other governments still included personal services and payments in kind, resorted early to the employment of usurers as a means of collecting its revenues. Dante put the Cahorsine money lenders in hell, but the Pope gave them the title of "peculiar sons of the Roman Church." Grosstête rebuked the Lombard bankers, and a bishop of London expelled them, but papal protection brought them back. Archbishop Peckham, a few years later, had to implore Pope Nicholas III to withdraw a threat of excommunication, intended to compel him to pay the usurious interest demanded by Italian money-lenders, though, as the archbishop justly observed, "by your Holiness's special mandate, it would be my duty to take strong measures against such lenders." The Papacy was, in a sense, the greatest financial institution of the Middle Ages, and as its fiscal system was elaborated, things became, not better, but worse. "The abuses which were a trickle in the thirteenth century were a torrent in the fifteenth. And the frailties of Rome, if exceptional in their notoriety, can hardly be regarded as unique. Priests, it is from time to time complained, engage in trade and take usury. Cathedral chapters lend money at high rates of interest. The profits of usury, like those of simony, should have been refused by churchmen, as hateful to

God; but a bishop of Paris, when consulted by a usurer as to the salvation of his soul, instead of urging restitution, recommended him to dedicate his ill-gotten wealth to the building of Notre Dame."[12]

In 1571 the Act of 1552, which had prohibited all interest as "a vyce moste odyous and detestable, as in dyvers places of the hollie Scripture it is evydent to be seen," was repealed. The exaction of interest ceased to be a criminal offense, provided that the rate did not exceed ten per cent.

It was the need of monarchs for money—mainly as the sinews of war—which helped to break down the old rule. As the money economy grew, more and more were princes compelled in emergencies to turn to the Jews, Lombards, or others who afforded the means of replenishing the royal treasury at times when money was urgently needed. Great monarchs had not been particularly scrupulous in keeping faith with these creditors; but in the fifteenth century, Cunningham[13] tells us, they were forced to be more careful in regard to their engagements. An inter-civic money-market had been developed. The great city communities of the Middle Ages were frequent borrowers, since they had need of money both for civic improvements, such as the repair of their walls, and also for military operations. As the security they offered was excellent the terms on which they could obtain money were comparatively moderate. The monarchs of the day were forced to offer good security, too, in order to borrow at all; and they were compelled to repay the loans, if they wished to maintain their credit and be able to borrow again. The monarchies of Europe outstripped the civic communities as political powers, but the civic communities had forced the monarchs to accept mercantile methods and standards in the management of their finances.

This mention of the monarchs' need of money and the Church's attitude to usury brings us to a striking fact in the relation of one race, the Jewish, to the development of trade and the money device



REPUDIATED MISSISSIPPI BOND

This is one of a series of similar bonds issued between 1830 and 1850 by certain Southern States and afterwards repudiated. In the case of the bond reproduced above, judgment for the principal and interest was given against the State of Mississippi in its own Superior Court of Chancery in 1852, and confirmed on appeal to its High Court of Errors and Appeals (Records. Vol. 25, April Term 1853). Five Coupons were paid prior to 1841, since which year the whole issue has been repudiated.

Confederate five hundred dollar note, issued at Richmond in 1864, and bearing the inscription: *Two years after the Ratification of a Treaty of Peace between the Confederate States and the United States, the Confederate States of America will pay the bearer on demand Five Hundred Dollars.*

United States bank note for ten cents.

lready in Roman times we get hints of their influence. Cicero's ation in defense of Flaccus, who had been accused of extortion Asia, refers to the movements of specie, under the agency, "as is vious," says Thorold Rogers,[14] "of Jewish bankers or bullion deals." It appears that Flaccus interfered with their business by prohibiting the exportation of specie from Asia Minor, and the prosetion laid great weight on the prætor's misconduct. We do not now from the apologist what was the precise action of the prætor, yond inhibition and confiscation. It is pretty certain that Cicero trying to appeal to Roman contempt for foreign rites. He alleges at these movements of specie were "carried by the Jews." It seems rtain, indeed, that such activities were common sixty years before ir era, not only in Italy, but in every province of the empire, and at to interfere with these transactions was to provoke powerful emies, not, thinks Rogers, so much among the Jews, but among ose who recognized the advantage of this bullion trade.

We thus see the antiquity of this race's concern in the banking d money industry. And the usury laws strengthened ultimately eir position in this respect.

The consequence of the condemnation of usury by the Church as to throw most of the dealing in money in the early Middle Ages to the hands of the Jews.

Very much in advance of his age, William the Conqueror, dering to organize his revenues on a monetary basis, induced some ws to accompany him to England, as his scheme could not be carred through without the presence and assistance of moneyed men. he Crown desired to have command of money, and the wealth the subjects generally consisted of land and goods. The Jews uld be called upon by the Crown to make advances in money, hile the taxes were being collected in kind and realized; in other ses the capitalists might be willing to lend money to a taxpayer, that he could meet the royal demands with current coin. The nglish Jews at about this period, in Cunningham's view, "unoubtedly facilitated the important fiscal changes which were carried

out in the period succeeding the Norman conquest." They attained their greatest prosperity and highest importance in the Jewish world in the latter part of the twelfth century and the beginning of the thirteenth. "After that date, the more general diffusion of money economy may have limited the field for their operations, while their practical monopoly was broken down by the Italian bankers. It is at all events instructive to note that whereas William the Conqueror found it necessary to introduce the Jews into England, circumstances had so far changed that Edward I was able to dispense with their services and to expel them from the country." [15]

During the period of their residence in England the Jews were considered as deriving all their privileges from the hand of the king and every privilege was dearly bought. A number of regulations were enforced, partly with the view of protecting borrowers and partly that the king might know how much his Jews could afford to pay. An illustration of popular animosity is found in the insertion of a clause in the charters granted by Henry III to Newcastle and Derby, forbidding any Jew to live in either place. Ultimately in 1290 the Jews were expelled in a body from the kingdom under circumstances of great barbarity, and were not allowed to return until the time of Cromwell.

Among the Germanic peoples they seem in medieval times to have fared better. Even there they occupied themselves first and foremost with trade. This they were forced to do, Ehrenberg tells us,[16] for though for centuries they were allowed to buy land, yet in actual fact there was little room for them either in the old District Associations (markgenossenschaft) or among the great landowners who were the ruling class in Carlovigne times. In the few towns of the early Middle Ages, on the other hand, the Jews occupied a highly privileged position. Their trade was indispensable to the German people, who had little of their own, and their ability as bankers to the princes, whose need of money had increased greatly since the time of the Crusades. Thus on the continent also the

became the first professional money lenders of the Middle Ages. The princes often chose a shorter and cheaper way of using the Jews' capital: they confiscated their property. Other people who needed money could not use this method so frequently. On the occasions when this method was employed, it was on a grand scale, the Jews were killed, their houses were plundered and burnt. Religious hatred here combined with the natural hatred of the oppressed debtor for his creditor. Persecution forced the Jews to buy the ruler's protection with new loans of money, in which they paid themselves for the great risk of loss by charging correspondingly high interest.

The suspicions which attached to money lending attached almost equally to the money exchanging which in large measure had been in Jewish hands since biblical times. After the return of the common use of money to Europe between the twelfth and thirteenth centuries there were occasional concourses of merchants when the rates for foreign payments were settled by bargaining in a market. The coin of each country was rated in terms of a standard unit (scudi de marche), and money was bought or sold at this price. In so far as this represented the difference in the fineness of the coins respectively, the work of exchangers was of course recognized as necessary and useful business. "There must have been times, however, when the rates were affected by the supply and demand for bills on a particular country, and by the purchasing power of money in that country. From the standpoint of the medieval moralists there was much suspicion, to put it no more strongly, attaching to all such transactions; they held that silver was silver, and that for any one to get advantage by exchanging silver for silver must somehow be unfair." [17]

As Cunningham has pointed out, [18] the fact that the same coin might have a different purchasing power in one country that was well supplied with the precious metals, from that which it had in a land where bullion was very scarce and the range of prices low, seemed entirely at variance with the theory of a "just price," intrinsic

in the thing itself; and the selling of coins and making a price fo coins, as was done at fairs and other places of resort, appeared t be in itself a disreputable occupation by which the exchanger suc ceeded in obtaining a sordid gain. The real justification for varyin rates of foreign exchanges was unintelligible to the ordinary me of probity of the time; and the merchant had little means of check ing the cambist's calculations. "International exchange business wa not clearly distinguished by public opinion from mere money chang ing, and conservative writers, as well as official policy, applied t the former ideas applicable only, if at all, to the latter. To chang one currency into another was permissible enough, provided valu was given for value. To take advantage of deviations from the min par of exchange, still more to cause them, was an act of fraud th more heinous because it corrupted the very life-blood of legitimat trade. It was an aggravation of the offense that its motive was t realize a gain which, in itself, was forbidden by the law, both of th Church and of the State. For usury, and continuous usury, wa avowedly the very essence of the whole business. The honest mer chant who labored in his vocation might slip from the straight pat under the stress of temptation. The sin of the dealer on the ex changes, where, in the discounting of bills, usury as the paymer for time appeared naked and unashamed, was not accidental, but trade." [19]

The drawer who discounted a bill in order to receive in Londo the value of money which stood to his credit in Antwerp, or whic would stand to his credit in a few months' time, was obviousl borrowing. The discounter was making a loan for which h charged "half usance," "usance" or "double usance," according t whether it was for thirteen days, one month, or two months.

Moralists of the day made a distinction between "exchange real or "natural exchange" and "merchants' exchange." A writer c about the year 1575 puts the distinction thus: "Natural exchange upon a certain sum of any prince's money containing a certain nun ber of ounces of fine silver in every pound weight, or carats of fir

gold in every ounce in gold delivered in one place, to agree by bill to deliver a like number of ounces of fine silver or like carats of fine gold coined in another place where it is desired. Merchants' exchange is upon credit and a bill to deliver an able man that seeketh at any sum of money he requireth in any place, where exchange lieth, to repay there a certain sum that containeth more number of ounces of fine silver or carats of fine gold coined than the money did that was delivered him. In natural exchange the delivered seeketh out the taker, maketh suit to the taker to pay him his money where he desireth it, requireth only of the taker value for value, delivereth his money for ease of carriage and danger of losing. In merchants' exchange the taker seeketh out the deliverer, maketh suit to the deliverer to help him with so much money to have at such a place again, agreeth the delivered shall gain by him, taketh it up either to pay his credit, or to employ it about profit, or to pay his necessaries, or to serve another man's necessity." [20]

The moral distinctions involved are dealt with at enormous length by writers like Thomas Wilson in his "A Discourse upon Usury." Such men were concerned with credit as a problem of economic ethics, persuaded that values were objective realities with which only the criminal would tamper, and obsessed by the fear that the object of exchange transactions was to impoverish the realm by exporting money at a profit.

In all this moralizing, which stretched over so many centuries, and where writers enter in such detail into the relation of ethics to commercial conduct, and discuss the subject—within the limits of their premises—with such acumen, no writer seems ever to have raised any question touching the morality of the implied objective of the Mercantilist policy described in the previous chapter.

During the centuries marked by the condemnation of usury practically all monarchs and statesmen acted upon the assumption that

one state enriched itself to the extent that it could obtain "treasure (*i.e.*, gold and silver) possessed by another, and that its public polic should be directed to obtaining that treasure, taking it from foreig states and so, by the same degree, impoverishing them. What wa held true as between individuals—that one party must lose by ex change if the other party gained—was held to be manifestly true a between nations. But while the moralists and the Church had grav warnings touching the individual transaction; while the trader wh impoverished another individual was held to be guilty of grave sir the statesman who managed to impoverish other nations was hel blameless and patriotic. A policy consciously directed at enrichin the State at the expense of foreigners, escaped, so far as one ca gather, the mildest shade of blame in an age which made the takin of interest a crime comparable to murder.

But to brush aside as absurd and reasonless the whole medieva attitude to trade because of confusions like those just describe would be to miss the essence of that which distinguishes the ol view from that of the modern world. It was not merely that th medieval moralists were dealing with different conditions; nc merely that the Church, however blunderingly, was attempting t protect the simple peasant in a season of scarcity from the avaric of the village sharper and money lender. The point of the older vie was that all economic processes should be subject to the moral law The individual tradesman, merchant, capitalist, was held morall responsible for the outcome of his activities. If the result of man enterprise was to impoverish neighbors, that man could not mo ally ignore that result merely because the enterprise itself was lega In our day, if, say, by some improvement of process an industriali can make a fortune but in so doing ruin competitors, we shoul regard it as a strange suggestion that he should be deterred by reasc of the suffering he would occasion. We have a code of morals, consideration for others, of mutual helpfulness, public charity ar assistance. But we do not mix all that with business. We do n see how we can. We tend to put our moral values in one compa

nent and our economic values in another. But to the medievalist hey were all in one compartment, and he would not have known ow to separate them.

"There were many evils in the business life of the time that it was lesirable to check," says Cunningham, speaking of the pre-Reformaion Europe, "and definite principles as to what was right and vrong in monetary transactions were formulated by contemporary noralists with the view of establishing the grounds and limits of vise interference in matters of trade. Their economic analysis was ery defective, and the theory of price which they put forward is ntenable; but the ethical standpoint which they took is well worth xamination, and the practical measures which they recommended ppear to have been highly beneficial in the circumstances with vhich they had to deal. Their action was not unwise; their common ense morality was sound; but the economic theories, by which hey tried to give an intellectual justification for their rules and heir practice, were quite erroneous." [21]

A whole group of writers of whom the most modern and most mportant is R. H. Tawney (particularly in his "Religion and the Rise of Capitalism," which has here been quoted) have attempted o establish a causal relationship between the Reformation and the ew attitude to economic activities. The groups of German theoogical writers who have dealt with this aspect of religion and capalism include Max Weber ("Die protestanische Ethik und der Geist des Kapitalismus," first published in the "Archiv für Sozialvissenschaft und Sozialpolitik Statistik," vols. xx, xxi, and since reprinted in vol. i of his "Gesammelte Aufsätze zur Religionssoziolo-ie, 1920); Troeltsch ("Die Soziallehren der Cristlichen Kirchen" nd "Protestantism and Progress," 1912); Schulze-Gaevernitz "Britischer Imperialismus und Englischer Freihandel," 1906); Cunningham ("Christianity and Economic Science," 1914, chap. v).

Weber's main thesis is that Calvinism, and in particular English Puritanism, played a part of preponderant importance in creating noral and political conditions favorable to the growth of capitalist

enterprise. This appears to be accepted by Troeltsch. It is submit ted to a critical analysis by Brentano (Die Anfänge des moderne Kapitalismus, 1916, pp. 117-57), who dissents from many o Weber's conclusions.

M. L. Heenbicq finds the genesis of English imperialism, politica and economic, in the Protestant interpretation of the Bible (Genes de l'imperialisme anglais, 1913); Dr. Cunningham remarks on th alliance of Calvinism and Capitalism (Christianity and Economi Science, 1914, c. 5); and Dr. G. O'Brien makes Protestantism respon sible for both Capitalism and Socialism (Essay on the Economi Effects of the Reformation, 1923).

A final paragraph or two from Tawney will indicate sufficientl the position of those who, with him, take the view that the moder attitude is not all gain. Of the earlier attitude he says:

> The suspicion of economic motives had been one of the earliest elements in the social teaching of the Church, and was to survive till Calvinism endowed the life of economic enterprise with a new sanctification. . . .
>
> If reluctant to condemn, it (the Church) was insistent to warn. For it was of the essence of trade to drag into a position of solitary prominence the acquisitive appetites; and towards those appetites, which to most modern thinkers have seemed the one sure social dynamic, the attitude of the medieval theorist was that of one who holds a wolf by the ears. . . . The medieval theorist condemned as a sign precisely that effort to achieve a continuous and unlimited increase in material wealth which modern societies applaud as meritorious, and the vices for which he reserved his most merciless denunciations were the more refined and subtle of the economic virtues. "He who has enough to satisfy his wants," wrote a Schoolman of the fourteenth century, "and nevertheless ceaselessly labors to acquire riches, either in order to obtain a high social position, or that subsequently he may have enough to live without labor, or that

his sons may become men of wealth and importance—all such are incited by a damnable avarice, sensuality or pride." [22]

The fact that the Church could not always impose its standards, nor live up to them itself, is not the main point:

Stripped of the eccentricities of period and place, its philosophy had as its center a determination to assert the superiority of moral principles over economic appetites, which have their place, and an important place, in the human scheme, but which, like other natural appetites, when flattered and pampered and overfed, bring ruin to the soul and confusion to society. Its casuistry was an attempt to translate these principles into a code of practical ethics, sufficiently precise to be applied to the dusty world of warehouse and farm. Its discipline was an effort, too often corrupt and pettifogging in practice, but not ignoble in conception, to work the Christian virtues into the spotted texture of individual character and social conduct. That practice was often a sorry parody on theory is a truism which should need no emphasis. But in a world where principles and conduct are unequally mated, men are to be judged by their reaches as well as by their grasp—by the ends at which they aim as well as by the success with which they attain them. The prudent critic will try himself by his achievement rather than by his ideals, and his neighbors, living and dead alike, by their ideals not less than by their achievement.

And as to its comparison with this age:

The quality in modern societies, which is most sharply opposed to the teaching ascribed to the Founder of the Christian Faith, lies deeper than the exceptional failures and abnormal follies against which criticism is most commonly directed. It consists in the assumption, accepted by most reformers with hardly less *naïveté* than by the defendants of the established order, that the attainment of material riches is the supreme object of human endeavor and the final criterion of human success. Such a philosophy, plausible, militant, and not indisposed, when hard pressed, to silence criticism by persecution, may triumph or may decline. What is certain is that it is the negation of any system of thought or morals which can, except by a metaphor, be described as Christian. Compromise is as impossible between the Church of Christ and the idolatry of wealth, which is the practical religion of capitalist societies, as it was between the Church and the State idolatry of the Roman Empire.

CHAPTER IX

MONEY KINGS AND KINGDOMS OF THE PAST

Banking in its beginnings probably older than coinage, but in something like its modern form began in money changing which took place first on stalls in the streets and in the Temples. It reëmerged after the Renaissance and added bill discounting at the old Fairs, helped along by the Crusades and the great trading Guilds and Bunds, which often enjoyed extra-territorial rights. Italian Bankers were at first the richest and most powerful, followed by Germans and Dutch. The Fuggers as a type of Sixteenth-Century Money Power and the part played by the Banker in international politics. The relations of the Monarchs and Princelings of the time to the Money Kings. The rise of the House of Rothschild and the passing of that type of money power.

CHAPTER IX

MONEY KINGS AND KINGDOMS OF THE PAST

BABYLONIAN and Chaldean records furnish us evidence of financial operations, which in our day belong to banking, long before there was coinage, that is, long before money had entered into ordinary daily life.[1] There were mortgages and bills of exchange; there was even usury (though the early usury dealt with commodities, not coin). An illustration of a Babylonian banking instrument appears in Chapter II, facing page 11. Codes like those of Hammurabi deal at length with regulations touching such things as debts and mortgages.*

Furthermore, the first coinage was issued by private coiners—merchants who put their seal upon the precious metals as a guarantee of quality. The function of issuing money is one which we should to-day regard as peculiarly that of banking. Money changing—exchange business—arose almost as soon as coining arose, and in very early times occupied a much larger place in the current use of money than it does in our day. For in ancient and Renaissance times (indeed, until the nineteenth century), foreign coins circulated in most countries freely side by side with the native. But as debasements were never-ending, and ratios were perpetually changing, even the ordinary citizen, or shopkeeper, as distinct from the merchant

* Although as Wells ("Outline of History," p. 97) warns us, it did not yet mean "a money economy." "No doubt there were bankers in Babylon of 1,000 B.C., but they lent in a far more limited and solid way, bars of metal and stocks of goods. . . . To begin with, metals were handed about in ingots, and weighed at each transaction. . . . The promise to pay so much silver or gold on 'leather' (= parchment) with the seal of some established firm is probably as old or older than coinage. The Carthaginians used such 'leather money.' We know very little of the way in which small traffic was conducted. Common people, who in those ancient times were in dependent positions, seem to have had no money at all; they did their business by barter. Early Egyptian paintings show this going on."

doing a foreign business, was continually in need of having one currency changed into another. Street money changers with their wooden benches for throwing down a coin to see whether it rang true, and their scales for weighing worn coins, were on every street corner in ancient Rome—and in other cities found their way even into the synagogues, as we know. They were a dubious class, almost necessarily, as they had to deal so often in incalculable values. We know that it is extremely difficult for the ordinary man in our day, helped as he is by newspapers with instantaneous notification of relevant facts and daily telegraphic communication between stock exchanges and banks, to understand the factors which enter into exchange fluctuations. Even with the aids just mentioned bimetallic currencies represent problems of valuation almost beyond us. But the old money changers had to deal not only with bimetallic, but multimetallic currencies—copper (not as a token as with us, but often as a standard), silver, gold, electrum (gold and silver combined), plated coins, debased coins. No wonder the place where they gathered could be called "a den of thieves." In describing a street scene in Rome about A.D. 100 Martial speaks of the money changer "clattering Nero's bad coin down on his dirty table," next to a workman hammering Spanish gold on an anvil, and a "bleareyed pedlar from the other side of the Tiber, offering sulphur matches for broken glass, carriers of pea-flour and smoking sausages, butchers with a reeking quarter of beef—each, to his own screechin tune, proclaiming his own wares."

Indeed, it was owing to hopeless confusion of coinage that banks in the modern sense, at the close of the Middle Ages began to arise. Merchants had to find some common measure of value, which should be independent of the debasements and changes to which the government currencies were subject. A "bank money," an international unit of account, became necessary. For long and in most cases this was (like the "Mark Banco" of the Hanseatic Banks) a determined amount of silver, represented by an imaginary coin which no king could debase.

The importance of this early function of banks—that of finding good money when the official and governmental money was bad money—has now passed from men's memories. But it was for long the most important of all banking functions, and as it throws much light on the conditions of the time and gives an explanation of the vast power of the financier in that economically unstable age, it is worth quoting Adam Smith's description of that type of bank—which is also a part of the history of banking.

Adam Smith explains that the currency of a great state, such as France or England, generally consists almost entirely of its own coin. "Should this currency, therefore, be at any time worn, clipt, or otherwise degraded below its standard value, the state by a reformation of its coin can effectually reëstablish its currency. But the currency of a small state, such as Genoa or Hamburg, can seldom consist altogether in its own coin, but must be made up, in a great measure of the coins of all the neighboring states with which its inhabitants have a continual intercourse. Such a state, therefore, by reforming its coin, will not always be able to reform its currency. If foreign bills of exchange are paid in this currency, the uncertain value of any sum, of what is in its own nature so uncertain, must render the exchange always very much against such a state, its currency being, in all foreign states, necessarily valued even below what it is worth.

"In order to remedy the inconvenience to which this disadvantageous exchange must have subjected their merchants, such small states, when they began to attend to the interest of trade, have frequently enacted, that foreign bills of exchange of a certain value should be paid, not in common currency, but by an order upon, or by a transfer in, the books of a certain bank, established upon the credit and under the protection of the state, this bank being always obliged to pay, in good and true money, exactly according to the standard of the state. The banks of Venice, Genoa, Amsterdam, Hamburg, and Nuremburg seem to have been all originally established with this view, though some of them may have afterwards

been made subservient to other purposes. The money of such bank being better than the common currency of the country, necessaril bore an agio, which was greater or smaller, according as the currenc was supposed to be more or less degraded below the standard of th state. The agio of the Bank of Hamburg, for example, which said to be commonly about 14 per cent, is the supposed differenc between the good standard money of the state, and the clipt, wor and diminished currency poured into it from all the neighborin states."

This bank received both foreign coin, and the light and wor coin of the country at its real intrinsic value in the good standar money of the country, deducting only so much as was necessary fc defraying the expense of coinage, and the other necessary expens of management. For the value which remained, after this sma deduction was made, it gave a credit in its books. "This credit adds Smith, "was called bank money, which, as it represented mone exactly according to the standard of the mint, was always of th same real value, and intrinsically worth more than current mone It was at the same time enacted, that all bills, drawn upon or neg tiated at Amsterdam of the value of six hundred guilders and u wards should be paid in bank money, which at once took away a uncertainty in the value of those bills. Every merchant, in cons quence of this regulation, was obliged to keep an account with th bank in order to pay his foreign bills of exchange, which necessari occasioned a certain demand for bank money." [2]

These exchange banks did not require capital since the object fc which they were established was to turn the values with whic they were entrusted into "bank money," that is to say, into a cu rency which was accepted immediately by merchants without th necessity of testing the value of the coin or the bullion brought them. The "value" they provided was equal to the "value" th received, the only difference being the amount of the small char they made to their customers, who gained by dealing with the more than equivalent advantages.

These banks have now disappeared but one remained in almost s original form in Hamburg down to the end of the nineteenth ntury. A banker writing in 1873 says of it: "The bank of Hamrg is now the last survivor of those banks, whose business lay in ie assistance of commerce, not by loans, but by the local manufacre, so as to speak, of an international coinage. In a city of the ighest rank of commercial activity, but greatly circumscribed in rritory, continually receiving payments for merchandise in the in of other countries, a common standard of value was a matter primary necessity. The invention of bank money, that is, of a oney of account which could be transferred at pleasure from one older to another, enabled the trade of a place to be carried on without any of those hindrances to business which must have followed ie delay and expense attendant on the verification of various ins differing from each other in weight, intrinsic value, standard purity in metal, in every point in fact in which coins can differ om each other. By supplying a currency of universal acception ie Bank of Hamburg greatly contributed to the prosperity of that ty."

The early banking of Florence—and the bankers of Florence layed an enormous part in the history of banking—was of a somehat different type from the foregoing. These early Italian banks ere for the most part "giro" or circle banks; "notes issued on deosits of specie placed in the bank passed from hand to hand, the eposit remaining untouched until the final liquidation of the whole ircle of bargains." The banker made no use of the money and was aid a fee for guarding it.

There were in the fourteenth century in Florence between seventy nd eighty private bankers, who soon gained such an eminent posiion in finance that they were entrusted with the collection and dministration of the public revenues, and the money transactions f almost every country of Europe passed through their hands. The ailure of the houses of Bardi and Peluzzi in 1345, when Edward

VIII had repudiated his debts to them, caused widespread ruin i Florence.

Before the third decade of the fourteenth century the Venetia money changers had developed into recognized keepers of deposit while a little later they were settling the debts of their custome by book transfers of credit.[3] "It is tolerably clear," writes a wel known authority,[4] "that private banking began in Venice as an ac junct of the business of campsores, or dealers in foreign moneys The money changers, changeurs, or campsores, were the exchang specialists and financial intermediaries of medieval Europe; the fai were their clearing houses.

It was the revival of the money system at about the time of th Crusades, after its collapse with that of the Western Empire, tha gave to the Italian cities their preëminent position as the bankin centers of the Renaissance. It synchronized with the renewed use c gold as money, though six centuries were to elapse before silve was to disappear as the favored standard.

The conquest of Constantinople by the Crusaders in 1204, gave t the Latin races for the next fifty years control of the Black Sea an the Crimea—then the chief gold-yielding districts—and brough them into close relations with the Byzantine Empire, which had fo centuries been accustomed to a gold currency, and led to a grea increase of trade with the East. The trading towns of Italy wer first affected by the change, as these lay on the main route to th East, and they reaped the benefit of the trade with the East tha developed in the wake of the Crusaders. The gold florin struck a Florence in 1252 started a new era for the monetary systems c Europe; gold coins were struck very soon afterwards in the countrie of Western Europe, and in the fourteenth century numerous exper ments in gold coinage were made.

As we have already noted bills of exchange had been known t the Romans, and their use, which had probably never quite died ou was revived by the Florentines in the twelfth century and by th Venetians in the thirteenth century, and was greatly extended at th

me of the Crusades by the papal agents who collected sums of ıoney for the Pope in the countries that acknowledged his authority. As early as 1229 there were papal agents in this country, and the ope drew bills on English bishops and abbots which they were ɔliged to honor on penalty of excommunication. In the reign of dward I was passed the first law—the Statute of Merchants, 1283—:cognizing mercantile obligations, and in 1303 a statute passed for ıe protection of foreign merchants enacted that they might pay ıstoms duties on their exports by bills on their partners or prin-pals. Promissory notes payable to a man or his assigns were nown in the reign of Edward IV, and in the reign of Richard II lls of exchange are referred to as a means of conveying money out f the realm, though not as a process in use among English mer-ıants." [5]

In view of the doctrinal attitude taken by the medieval Church ɔwards financial activities and banking there is something a shade onical in the fact that the Church was itself during several cen-ıries, for the purposes of collecting its revenues, the greatest finan-al organization and the greatest banker of the age. Cunningham [6] lls us that the "camera," as the Papal treasury at Rome was called, ad an elaborate organization; and the moneys obtained in the dif-rent countries of Christendom were collected by Italian bankers ho were generally known as the Pope's merchants. "The papal scal requirements were thus the principal cause which led to the evelopment of foreign banking. The revenue from England was ıbmitted by bills of exchange, which were generally met by the xportation of English wool to Italian markets." The chief agents ɔr forwarding the money to Rome were known as "depositaries," nd they were almost exclusively Italians; but the actual work of btaining the papal dues was done by the collectors. "Much of this ncome was doubtless collected in coin; but some of it, such as tithes, ppears to have been paid in kind in the thirteenth century, and it ould then be the duty of the collectors to realize the money worth f the corn or other products which came into their hands. They

had also occasional opportunities of advancing silver to persons wh were temporarily unable to meet the papal demands, and of er gaging in a great deal of profitable, but not very reputable busines In so far as the Pope's merchants gained by carrying on foreig exchanges, they were condemned by the public opinion of the da and in so far as they took advantage of the necessitous, they gav rise to public scandal." [7]

Just as the first exchange bank had been a peddler's stall in th streets of Rome or Alexandria, or in the Temple in Jerusalem, s the first stock exchanges were the annual or periodical fairs of th medieval cities, vestiges of which remain in the fair, for instance, Leipzig.

For the wholesale trade of the Middle Ages the fair was th characteristic form of business concentration, as the exchange is fo the wholesale trade of modern times. There were, however, e changes in the Middle Ages, but they were not used for dealing i commodities, but in bills of exchange.

In the markets with a considerable home trade, especially in th trading cities of Italy, dealings arose from the business which d veloped at the banks of the money changers native to the city, whe the notaries likewise had stalls in the open air. Here there aros on the one hand, money changing to facilitate the local payments the giro and deposit business; and, on the other, in order to facil tate payments between places near the traffic, in bills of exchang The latter, in the important markets, had the characteristics of e change business as early as the fourteenth century.

In the countries north of the Alps bill business developed in th closest connection with the factories of the Italians. The streets ar market places where they lived, and more especially where they ha their consular houses or loggias, were the localities where bour business first developed. Hence the bourse itself was often call Loggia or Loge. The present term "Bourse" is taken from th Square in Bruges, the greatest medieval foreign market, where th Florentines, Genoese and Venetians had their consular houses.

In the markets of Southern France and Northern Spain, which lready had bourses in medieval times, these seem to have arisen artly from the concourse round the tables of the money changers nd partly to have been connected with the factories of the Italians.[8]

The assigning of mercantile debts by means of the bill of exhange was practiced in England in the fourteenth century by merhants of continental extraction, the wealthiest of whom were imortant royal money lenders. "But though the Englishman was sing this instrument with increasing frequency before the end f the following century, he does not appear to have carried out any ıajor operations in the 'business of exchange' prior to the age of the 'udors."[9] With, however, the expansion of England's trade during ıe latter part of the Tudor period the transactions of Englishmen ı this particular sphere increased so rapidly that by the end of the 'udor régime they were of an outstanding nature. It is, therebre, not surprising to find during the reigns of Elizabeth and ames I certain English business men gradually developing into recgnized money lenders, money changers, bullion merchants, exhange specialists, and financial middlemen.

Of these business men four types—the merchant, the broker, the rivener and the goldsmith—became prominent as financial interıediaries. They are the pioneers of the banker's trade in England; ıe origins of English banking must be sought for in their transacons.

By the third quarter of the fifteenth century the financing of forgn trade had become sufficiently profitable to form the main busiess of a special group of brokers and discount houses. The discountıg of bills, by means of which the merchant received his money "a reat while before it is money indeed," is obviously of the essence of ny regular system of international trade. "As far as concerned the mplest aspect of the foreign exchanges—their use as a mechanism or the settlement of debts between merchants of different nations—either the practice nor the theory of the age differed much from ur own. Foreign trade was universally carried on upon credit; 'the

greateste quantitye of wares transported either outward or inward is boughte by money taken up by exchange.'" [10]

It was by bills on Lyons, for example, that the English vintners with the help of Italian bankers in London, paid for wine imported from Bordeaux, while the trade with France in Welsh friezes and "cottons" was financed by London merchants who discounted bills on Rouen. The merchants of the London Hanse, who, in spite of the attacks of the Merchant Adventurers, did a large business both as importers and exporters, were, in the words of Gresham, "men that ran all upon the exchange for the buying of their commodities."

The word "banker" was coming into use in England in the first half of the sixteenth century, to designate, in particular, money lenders engaged in international finance. Tawney takes the view that the vast majority of lenders were, in the rural district, farmers, yeomen or gentlemen, and in the towns, merchants, shopkeepers, mercers, tailors, drapers, haberdashers, grocers and similar tradesmen; and, "except when summarily damned with the approbrious epithet of usurer or extortioner, they were described by the craft which was still their chief characteristic." The ubiquity of credit transactions which drew from the moralist the shocked protest that not only money men but "merchant men, citizens, noblemen, courtiers, gentlemen, graziers, farmers, plowmen, artificers," and even the clergy lent money at interest, was itself a proof of the relative backwardness of credit organization. "The phenomenon which meets us, in fact, in the world of finance is similar to that which occurs in manufacturing industry. It is a stage of what may be called semicapitalism, intermediate between the specialized financial mechanism of the later seventeenth century, and casual pawnbroking." [11]

England was beginning to shake off her need of either Italian or Netherlander.

The surviving records of Gresham's financial activities in the City of London show that he obtained large sums for the use of the

tate from Englishmen. The following interesting item[12] illus-ates his method of recording these London loans:

Item of S^r^ Rog^r^ Martenn, Knyght, the xxvj date of No-vemb^r^ 1569 to paie the xxvi daie of Maye an^o^ 1570 the somme of xvc^li^: more for the brokerage after p cento some xv^li^, more for thinterest after vj upon the hundredthe for vj moenthes some i^xi^x^j^ xi^li^ . . . . . lmvjcvj^li^

On the Continent finance had already become astonishingly inter-ational; and the center had shifted from the south to the north. enice had given place to Antwerp and the Baltic cities, particularly ntwerp. Since the beginning of the fourteenth century it had been market of some importance with two fairs a year, attended by erchants from England, Italy, and the Hansa towns. There was a eat trade in commodities between the Mediterranean cities, which ntrolled the Levantine commerce, and the whole of Northern urope, where the German Hansa towns monopolized the trade. his trade in commodities together with the international dealings bills and money had originally been concentrated in Bruges. One astonished at the relative freedom of trade and security assured in ch an age to foreigners. "The trade in Bruges had been free mpared with the restrictions prevalent in other cities in the iddle Ages," says Ehrenberg,[13] but in comparison with the abso-te freedom enjoyed by the foreign merchants in Antwerp "Bruges ems medieval. For instance, in Bruges the brokers were a monopo-t corporation, but in Antwerp they were free. In Bruges only vorn money changers could engage professionally in money chang-g or giro bank business. In Antwerp, on the other hand, the harter of 1306 granted this right to all burghers, and in the city's ime there were practically no restrictions on the trade in money, ecious metals and bills. Clearing-house business was carried on by ok transactions without ready money. The hotel and lodging-use trade, which was extraordinarily important to the foreign

traders in the Netherlands, was in Bruges, but not in Antwerp, the subject of many stringent regulations on the part of the authorities. The trade restrictions which remained in Antwerp originated almost entirely with the foreign merchants. Both the ruler and the city magistracy tried to give trade all the freedom possible."

Every considerable capital in Europe at that period had a foreign area much like that of the Legations in Pekin to-day. Usually these "enclaves" were subject to all sorts of restrictions, but in Antwerp foreign merchants had as much liberty as those of the country and no one of the foreign nations was more highly privileged than the rest. Accordingly the divisions which had existed in Bruges between different sections of the population fell into abeyance, at any rate in so far as they had originated in jealously guarded rights and privileges. "Only the English, who had had a considerable trade in Antwerp's early period, kept a somewhat special position. The other nations were distinguished by their appearance, language and customs; but in other respects they formed one merchant class with identical rights, duties and interests." [14]

The two old Antwerp fairs, in the early spring and the early autumn, were what the English merchants used chiefly for their cloth trade. The cloth fleets came in at these times and on their arrival the English held their "show days." It was very seldom that they visited the other fairs. There was no important change in these arrangements while the English dealt in Antwerp, and even afterwards, for they were determined by national conditions on which the English wool season as well as the shipping season depended. When, however, the English cloth trade ceased to be the determining factor in Antwerp, and the other foreign merchants transferred themselves in a body from Bruges to Antwerp, the firm structure of the old fairs was broken down. In 1484 the Bruges office of the Hansa towns complained that in Antwerp the men of Brabant held a new staple with all sorts of goods and booths the whole year through, not only at market times. Two years later it was said that the people of Antwerp had begun a new market with the English

and now wanted to do business out of season. As far as the English were concerned, the alteration was not followed up. The importance of fair time in the Middle Ages consisted in the temporary suspension of the restrictions on the trade of foreign merchants which took place at these times. In Antwerp, since trade was free all the year round, the fairs lost much of their importance.

The system of fairs where foreign merchants attended had given rise throughout Europe to a system of what to-day we should call "extra-territoriality." The Hanseatic League, for instance, was something more than a Federation of Cities. It was an Association of Merchants who had secured privileges in the nature of extra-territorial rights in most of the capitals of Northern Europe, just as the European governments, with a more political objective did at a later date in the Chinese and the Turkish Empires.

As early as the beginning of the thirteenth century this system had carried Hanse merchants far into the Russian interior. We find the Gothland Association making in 1229 a treaty with a Russian prince and securing privileges for their branch trading station at Novgorod. According to the "Skra," the by-laws of the Novgorod branch, the four aldermen of the community of Germans, who among other duties held the keys of the common chest, deposited in Wisby, were to be chosen from the merchants of the Gothland Association and of the towns of Lubeck, Soest and Dortmund.

A historian of the Hanseatic League reminds us that the merchants of Cologne were the first to possess a guildhall in London and to form a "hansa" with the right of admitting other German merchants on a payment of a fee. The charter of 1226, however, by which Emperor Frederick II created Lubeck a free imperial city, expressly declared that Lubeck citizens trading in England should be free from the dues imposed by the merchants of Cologne and should enjoy equal rights and privileges. In 1266 and 1267 the merchants of Hamburg and Lubeck received from Henry III the right to establish their own hansas in London, like that of Cologne. The situation thus created led by 1282 to the coalescence of the rival

associations in the "Guild-hall of the Germans," but though the Baltic traders had secured a recognized foothold in the enlarged and unified organization, Cologne retained the controlling interest in the London settlement until 1476. Lubeck and Hamburg, however, dominated the German trade in the ports of the east coast, notably in Lynn and Boston, while they were strong in the organized trading settlements at York, Hull, Ipswich, Norwich, Yarmouth and Bristol. The counter at London, first called the Steelyard in a parliamentary petition of 1422, claimed jurisdiction over the other factories in England. The importance and independence of the German trading settlements abroad was exemplified in the statutes of the "Company of German Merchants at Bruges," drawn up in 1347, where for the first time appears the grouping of towns in three sections (the "Drittel"), the Wendish-Saxon, the Prussian-Westphalian, and those of Gothland and Livland. Even more important than the assistance which the concentration of the German trade at Bruges gave to that leading mart of European commerce was the service rendered by the German counter ot Bruges to the cause of Hanseatic unity. "Not merely because of its central commercial position, but because of its width of view, its political insight, and its constant insistence on the necessity of union, the counter played a leading part in Hanseatic policy. It was more Hanse than the Hanse towns."

The last of the chief trading settlements, both in importance and in date of organization, was that at Bergen in Norway, where in 1343 the Hanseatics obtained special trade privileges.

The steady growth, however, of the political state compelled the more purely commercial organization to give way,—"the absence of a German political State comparable in unity and energy with those of France and England, which could quell particularism at home, and abroad maintain in its vigor the trade which these towns had developed and defended with their imperfect union."

The last war of the League with the Scandinavian powers in the sixteenth century, which left it shorn of many of its privileges and of

any pretension to control of the Baltic basin eliminated it as a factor in the later struggle of the Thirty Years' War for that control. At an assembly of 1629, Lubeck, Bremen and Hamburg were entrusted with the task of safeguarding the general welfare, and after an effort to revive the League in the last general assembly of 1669, these three towns were left alone to preserve the name and small inheritance of the Hansa which in Germany's disunion had upheld the honor of her commerce. Under their protection, the three remaining counters lingered on until their buildings were sold at Bergen in 1775, at London in 1852 and at Antwerp in 1863.[15]

Well before the decline of the Hanseatic League the importance of the financial side of the developing trade was increasing. "A steady flow of capital was needed to finance the movement of the produce handled on the world-market, such as the eastern spice crop —above all pepper, which the impecunious Portuguese Government sold in bulk, while it was still on the water, to German syndicates— copper, alum, the precious metals, and the cloth shipped by the English Merchant Adventurers. The cheapening of bullion and the rise in prices swelled the profits seeking investment; the growth of an international banking system mobilized immense resources at the strategic points; and, since Antwerp was the capital of the European money-market, the bill on Antwerp was the commonest form of international currency. Linked to each other by the presence in each of the great financial houses of the Continent, with liquid funds, pouring in from mines in Hungary and the Tyrol, trading ventures in the East, taxes wrung from Spanish peasants, speculations on the part of financiers, and savings invested by the general public, Antwerp, Lyons, Frankfort, and Venice, and, in the second rank, Rouen, Paris, Strassburg, Seville and London, had developed by the middle of the century a considerable class of financial specialists, and a financial technique identical, in all essentials, with that of the present day. They formed together the departments of an international clearing-house, where bills could be readily discounted, drafts on any

important city could be obtained, and the paper of merchants of almost every nationality, changed hands." [16]

It is true money dealers were still coming into conflict alike with the temporal and ecclesiastical powers, and meeting the competition of both.

Neither the ancient world nor that of the renaissance was able to grapple with the problem of the exchanges when dealing with bimetallic currencies. From time to time the monarchs tried to be their own exchangers. That prerogative of the Crown was abandoned by Henry VIII in England though Charles I tried to reëstablish it in a proclamation worth reproducing since it reveals a number of financial facts of the period. The proclamation states that "divers of our predecessors have for some time past tolerated a promiscuous kind of liberty to all, but especially to some of the mystery and trade of goldsmiths in London and elsewhere, not only to make the said exchanges but to buy and sell all money or bullion, and from thence some of them have grown to that licentiousness, that they have for divers years presumed, for their private gain, to sort and weigh all sorts of money current within our realm, to the end to cull out the old and new moneys, which either by not wearing, or by any other accident, are weightier than the rest, which weightiest moneys have not only been molten down for the making of plate, etc., but even traded in and sold to merchants and strangers, etc., who have exported the same, whereby the consumption of coins has been occasioned, as also the raising of the silver even of our own money to a rate above what they are truly current for, by reason whereof no silver can be brought to our Mint but to the loss of the bringer, etc. For the reforming of all which abuses we have, by the advice of our Privy Council, determined to assume our said right, for our own profit and the good of the realm." The following year, as dissatisfaction was caused by the reëstablishment of the office, the King published reasons to justify his action. The goldsmiths, he said, when the office of Royal Exchanger was dropped in the reign of Henry VIII, began "to leave off their proper trade of goldsmithry

i.e., the working and selling of new gold and silver plate and manufacture, the sole intent of all their charters, to turn exchangers of plate and foreign coins for our English coins, although they had no right to buy any gold or silver for any other purpose than for their manufactures aforesaid, neither had any other person but those substituted by the Crown a right to buy the same. . . . They have raised the price of silver 2d. per ounce above the value of the Mint, which thereby has stood still ever since the eleventh of King James . . that for above thirty years past it has been the usual practice of these exchanging goldsmiths to make their servants run every morning from shop to shop to buy up all weighty coins for the mints of Holland and the East countries, whereby the King's Mint has stood still." A petition against the revival of the office of Exchanger sent to the King by the Goldsmiths' Company of London and by the London Corporation had no effect, but the office was not continued after the death of Charles I, and then the work fell again into the hands of the goldsmiths.[17]

That was a symbol: the financier was becoming more powerful than the king. Indeed it is probable that the individual financier had more direct and personal power over rulers and governments than he has ever had since. He was in a position to profit by a financial helplessness and penury of governments which has now in that degree at least for the most part, passed away. Up to as late as the eighteenth century taxation was hardly yet a regular and organized function of government (except in the case of the papal contributions), but had kept something of the character of an occasional aid. Governments farmed out the taxes, or sold monopolies, or went shares in trading ventures. In such conditions the financier had enormous, if precarious power.

As the story of the Fuggers, Hochstetters, Welsers, Schetzes, Dowckes, Tuckers, Lixhalls, Fleachamores, Van Dalls, Prowens, Hoffemans, Lyndenas and Rantzaviuses reveals, money, after the relatively moneyless economy of medievalism, was making itself felt as it had done in ancient Rome when it had "happened" there, as

Wells puts it. "The new world of the sixteenth century took its character from the outburst of economic energy in which it had been born. Like the nineteenth century, it saw a swift increase in wealth and an impressive expansion of trade, a concentration of financial power on a scale unknown before, the rise, amid fierce social convulsions, of new classes and the depression of old, the triumph of a new culture and system of ideas amid struggles not less bitter."[18] The financial adventurer (the word seemed less sinister then than now), had his opportunity in the stresses to which the new finance was exposed. "The centralized States which were rising in the age of the Renaissance were everywhere faced with a desperate financial situation. It sprang from the combination of modern administrative and military methods with medieval systems of finance. They entrusted to bureaucracies work which, if done at all, had formerly been done as an incident of tenure, or by boroughs and guilds; officials had to be paid. They were constantly at war. Government after Government, undeterred, with rare exceptions, by the disasters of its neighbors, trod a familiar round of expedients each of which was more disastrous than the last. They hoarded treasure, only to see the accumulations of a thrifty Henry VII or Frederick III dissipated by a Henry VIII or a Maximilian. They debased the currency and ruined trade. They sold offices, or established monopolies, and crushed the taxpayer beneath a load of indirect taxation. They plundered the Church, and spent gorgeously as income, property which should have been treated as capital. They parted with Crown estates, and left an insoluble problem to their successors."[19]

And then, of course, stepped in the money-lender—usually an individual money-lender.

The banker to-day is almost a public official. He handles not his own money, but that of the public, and must report to boards and committees and Treasury officials. He is the servant of a machine too complex for personal management, and usually, despite current romantic notions of "the money power," too unwieldy for domina-

on by purely personal influence. But in the Tudor and later times was an individual who dealt with government, and we get something far nearer to a personal "money power" than modern conditions in fact furnish. "Behind Prince and Pope alike, financing impartially Henry VIII, Edward VI and Elizabeth, Francis, Charles, and Philip, stood in the last resort a little German banker, with branches in every capital in Europe, who played in the world of finance the part of *condottieri* in war, and represented in the economic sphere the morality typified in that of politics by Machiavelli's Prince. Compared with these financial dynasties, Hapsburgs, Valois and Tudors were puppets dancing on wires held by a money-power to which political struggles were irrelevant except as an opportunity for gain." [20]

The financier received his payment partly in cash, partly in concessions, which still further elaborated the network of financial connections that were making Europe an economic unity. "The range of interests in which the German banking houses were involved is astonishing. The Welsers had invested in the Portuguese voyage of 1505 to the East Indies, financed an expedition, half commercial, half military, to Venezuela in 1527, were engaged in the spice trade between Lisbon, Antwerp and South Germany, were partners in silver and copper mines in the Tyrol and Hungary, and had establishments, not only at Lisbon and Antwerp, but in the principal cities of Germany, Italy and Switzerland. The careers of the Hochstetters, Haugs, Meutings, and Imhofs were much the same. The Fuggers, thanks to judicious loans to Maximilian, had acquired enormous concessions of mineral property, farmed a large part of the receipts drawn by the Spanish Crown from its estates, held silver and quicksilver mines in Spain, and controlled banking and commercial businesses in Italy, and, above all, at Antwerp. They advanced the money which made Albrecht of Brandenburg Archbishop of Mainz; repaid themselves by sending their agent to accompany Tetzel on his campaign to raise money by indulgences and taking half the proceeds; provided the funds with which

Charles V bought the imperial crown, after an election conduct with the publicity of an auction and the morals of a gambling he browbeat him, when the debt was not paid, in the tone of a paw broker rating a necessitous client; and found the money with whi Charles raised troops to fight the Protestants in 1552. The head the firm built a church and endowed an almshouse for the ag poor in his native town of Augsburg. He died in the odor sanctity, a good Catholic and a Count of the Empire, having se his firm pay 54 per cent for the preceding sixteen years." [21]

The Fuggers were perhaps the most famous of these Renaissan banking dynasties—famous, it may be, mainly because they ha left so vast a store of documents for the historian in the shape letters from their agents and correspondents. Most of these lette by the way, are of questionable value as bearing upon events; great value as revealing the state of mind (and credulity) of th time. Many of them tell of showers of blood, diabolical possessio demons descending in thunder clouds, and suchlike wonders.

The financial dynasties on the whole, too, were long lived. Nea two hundred years after the time of the first Fugger we find member of the family busy in England. "The Fugger is never fr me," wrote Vaughan to the English Privy Council in Septemb 1546, "the house of Bonvuce . . . pulls me hourly by the sleeve"; a it was with the firm of Fugger, which by 1508 had established agency in Antwerp, that more than one of the English royal agen particularly Sir Thomas Gresham, the greatest of them all, c ducted large transactions.

The Fugger did not belong, as did the Welser, the Hewart, t Langenmantel, and others, to the "old" families of Augsburg. Th ancestor, Hans Fugger, came to Augsburg from the village of Gra in the year 1367. He was a weaver, but he also traded, and he l what was a considerable fortune for those days, 3,000 florins.

A year after he came to Augsburg the Guilds obtained a share the management of the city, which hitherto had been exclusively the hands of the old families. The most distinguished Guilds w

e Weavers and Merchants, and they accordingly profited the most
the change. Hans Fugger's sons were already respected members
both Guilds, and one of them, Jakob, was Master of the Guild of
eavers, though he himself had ceased to weave.[22] Other families,
owever, were rising in the world, and there is nothing to show
at the Fugger were already specially prominent. Like most of the
ugsburg merchants they still dealt exclusively in "spices, silk, and
oolen materials," a trade where long-established relations with
enice as yet played the chief part.

Ehrenberg has summarized the story for us. Andreas was the
hest and most respected of Hans Fugger's sons. He gave the
mily a social lift by marrying a daughter of one of the old families
d was the ancestor of the Fugger vom Reh, so called from the doe
their coat of arms. Some of his sons largely increased the scope
the business, and had relations with the Netherlands, with Leip-
g, even, it is said, with Denmark. Incautious giving of credit,
owever, proved their ruin, and when Lucas the last son of Andreas,
ed in 1494, he left behind him more debts than assets. The branch
the Fugger vom Reh continued to sink, so that many of them
came handicraftsmen, or had to enter the service of their more
rtunate cousins, the Fugger of the Lilies (Gilgen) as clerks.

" 'Old' Jakob Fugger died, and his sons, Ulrich, George, and Peter,
rried on the business. Two other sons had died before their
ther, and two more Marcus and Jakob were intended for the
hurch. In 1473 Peter also died, and on the request of Ulrich and
eorge, Jakob abandoned his clerical career and became a merchant.
he family came rightly to consider this a great stroke of luck; for
kob 'the second' showed a real genius for business, and it is almost
ntirely to him that the Fugger owe their importance in the world's
story."

They had to begin business early in life in the Fugger house.
kob Fugger was just fourteen when he became a merchant in 1473.
e learned his business, like many other young South Germans of
at day, in the great business house of the Germans in Venice, the

Fondaco dei Tedeschi, where his elder brothers had a permanen warehouse. When he became partner and the three had carried o the business together for some time, they made an agreement tha their male heirs and descendants should leave their property i common in the business, but that the daughters should be give money down in dowries "so that the Fugger business may remain i every wise undivided."

Another great financial house were the Hochstetter. In the firs decade of the sixteenth century the Hochstetter was the most im portant business house in Augsburg after the Fugger and Welse "Ambrosius Hochstetter was the soul of the business. He carried i on with his brothers Hans and George and some other partner and later on took his sons Ambrosius and Joachim into partnershi The firm changed from time to time. The Hochstetter were amon the first South Germans to set up a branch in Antwerp. In 148 they bought a large piece of land in the Kipdorp Strasse, which the built upon and rounded off. This was divided up after the collaps of the house, and a street was made through it which still bears th name 'Hochstetter Strasse.'" [23]

In 1489—so the Augsburger chronicler Clemens Sander relates— Ambrosius Hochstetter visited the Archduke Maximilian, who wa held in prison by the burghers of Bruges, provided him with th means of subsistence, and also loaned him money which enabled hir to appease the men of Bruges. This story is not improbable, for th Hochstetter, even at the time of their fall, enjoyed the quite speci favor of the house of Austria, and Clemens Sander was apparentl informed of their relations.

The chief business of the firm was concentrated in Antwer where as a rule a member of the family lived. In 1505 they partic pated with 4,000 florins in the great expedition of the South Germa and Italian merchants to the East Indies; and since then carried o an extensive trade at second-hand in spices between Lisbon an Antwerp. The Hochstetter were the most hated monopolists their time. They acquired, it was said, their capital in small sums

eposits, and employed it to control the market of individual com-
odities. Clemens Sander informs us: "Princes, Counts, nobles,
urghers, farmers, serving-men and women have deposited the
oney they had with Ambrosius Hochstetter, and he has paid them
per cent. Many farmers' boys, who had not more than 10 gulden,
ave given it to him in his business, and thought it was in good
nds." For a time he must have paid interest on a million gulden.
ut it was common talk that he lied freely. No one has known that
e paid interest on so much. He was a good Christian and entirely
gainst the Lutherans. "But in his business he has often oppressed
e poor man, not only in the large articles of the world market, but
so in small wares. Thus he bought up ash wood when the roads
ere good and brought it to market when the roads had become
d. He did the same with wine and corn. He has often bought
the whole stock of one community at more than it was worth,
that he could squeeze at his pleasure the other merchants who
uld not do this. Then he has raised the price of goods in all lands
d sold them at his pleasure." [24]

The Hochstetter, like the Fugger, did business with England. In
arch, 1528, Richard Gresham recommended him to Wolsey, as one
the richest merchants in the Netherlands and having much in-
ence both at the Court of Brussels and in Germany. Hochstetter
d been very helpful to Gresham and other Englishmen when they
d been imprisoned in the Netherlands. But soon he himself
eded their help. Just then there were five or six ships loaded
ith grain for the Hochstetter to be sent to England. Differences
ose, the corn was seized in Holland, and the Hochstetter, who
d sold it to Richard and John Gresham for delivery against
nglish cloth, could not fulfill their contract. In July, 1528, Joachim
ochstetter himself traveled to England, where he had often been
fore. There he accused the Greshams, saying that during his last
urney to England they had scorned him as bankrupt in the Neth-
lands and done him harm in every way, so that the credit of his
use had been shaken in all Europe and he would be compelled to

sell a quantity of quicksilver under value only to obtain ready mone to pay his creditors. He demanded compensation from th Greshams for the damage he had suffered. Soon the house wa completely ruined.

Financial interdependence even then justified an appeal from on financial dynasty to another. In the spring of 1529 the old Am brosius Hochstetter implored the Fugger to help him. He propose that the creditors might choose representatives to whom he shoul disclose the whole of his assets and liabilities. This actually appea to have been done. But the further proposal, that 100,000 flori should be collected to maintain the house, was not carried out. Th chief creditors preferred to be satisfied at once, which naturally mad the catastrophe unavoidable, and in June, 1529, Lazarus Tucher too over claims of the Hochstetter in Portugal and Antwerp, as well a large quantity of pepper that they had to receive from the King Portugal. Further, in discharge of a debt which the Hochstett had only contracted in February of the same year, he took over a their extremely valuable real property in Antwerp.

By no means were these early financiers always Jews. But th Jew, alike by his capacity, and as a member of a distinct group, stoo out. And group solidarity gave to the Jew in the long run a advantage over his Christian colleague. A great romance, lik Feuchtwanger's story "Jew Süss" [25] brings this out, and gives us picture of the position of the financier in Renaissance Europe, an in continental Europe up to the end of the eighteenth centur

When Süss was sentenced to death in the Dukedom he had serv "There were prayers and feasts in all the synagogues, operations all the Chancelleries and Cabinets; money was collected, mu money, still more money, enormous sums of money, and all hand to Reb Isaac Landauer, court agent and good Jew, who was charg by the Rabbis and the communities to protect with all his streng

nd cunning and capacity the fallen Reb Josef Süss Oppenheimer, srael's saviour in time of need. Isaac Landauer had a plan, not a articularly cunning plan, but a bold and direct one, to be followed f they should really dare to condemn Süss to death. For this plan e needed money in fabulous quantities. And fabulous quantities f money flowed into his coffers, yellow gold, bills of exchange, nortgages; small people gave small sums and great people gave reatly, from all countries and all communities, from the Jews of he whole world."

The scene when Landauer appears before the Duke and his counelors is described:

Isaac Landauer said: "What Reb Josef Süss Oppenheimer did has caused osses in money and property to this one and that and to the country of Württemberg. Monetary wrongs can be repaired by money. We have combined, all we Jews, and we have collected money, much money, an enormous um of money. And so we have come and we beg Your Grace; let Reb Josef üss Oppenheimer go free. We will make good what wrongs he may have one, we will make it good and more than good, so that the country of Württemberg can prosper and flourish. We offer you, if you let the Jew osef Süss Oppenheimer go free, a voluntary recompense of five hundred housand double ducats."

The Duke-Regent and the two ministers had listened to the Jews n silence. "At the mention of Isaac Landauer's offer they started. The offer was a piece of impudence. But the sum offered was so normous, so much bigger than the highest amount that had ever tood in the budget of the Duchy, that it was impossible to dismiss uch an offer with simple words like shamelessness and arrogance. Five hundred thousand gold ducats! To attempt to buy off Josef üss with such an unheard-of sum was the bold project of a genius, vhich struck them dumb by its naïve grandeur. And Isaac Landauer had reckoned on that, he had based his plan on that. He had been convinced from the beginning that nothing could be achieved

by stratagems, arguments, insistence on justice or entreaties fo mercy. Perhaps such a blunt and naïve directness would achiev something."

The account goes on:

Before the gentlemen could recover from their surprise Isaac Landaue continued: "We will not pay in bills of exchange, nor in bonds. We are read to pay down gold, shining gold. Gold ducats, full and unclipped." H slipped to the door and summoned his men with a shake of his head and superior smile which challenged their astonishment. In dumb and tens bewilderment the Regent and his ministers gaped at the men who came i They were carrying sacks, small and very heavy sacks, which they emptie at a sign from the unkempt man. Out poured a stream of gold, minted gol of all currencies, red gold, Spanish, African, Turkish, from every quarter the world. It piled up, towered high, and never stopped; it grew man-hig and as broad as a full-grown oak, a mountain of gold. Dumbly gazed th small, crooked shabby Duke, and the bulky Bilfinger. Dom Bartelemi Pa corbo thrust his lean purple head out of his superannuated ruffle; his withere fingers crooked and stretched themselves, and could not resist the temptatio to stroke the gold, the pleasant gold, to bathe in the endless river. Isa Landauer stood beside it in his greasy caftan, his side-curls matted, in a awkward self-conscious posture, smiling disagreeably, one arm pressed close to his body with the palm of the hand flung outwards, while with the oth he combed his reddish, graying, goat's-beard.

There stands out of course one house which was the prototype the mysterious "money power" as expressed by the "dynasti financier—the House of Rothschild. Count Corti [26] described the r mantic rise of Meyer Amschel, the Elector of Hesse's "Court Jew and the division of the empire of European finance between h five sons.

The Rothschilds rose to enormous wealth on the financial nece sities of States during the Napoleonic wars and the impoverish years of peace that followed. But having made their fortunes war, they became bulwarks of peace and the status quo. Th money flowed into commerce and productive industry, notably ra

ways and steamships. We see the Rothschilds, with the French and British houses at the head, almost always throwing their influence on the side of peace, a policy in which they were consistent from the creation of Belgium in 1830 right down to Alfred Rothschild's work for an Anglo-German rapprochement in our own times, and which at one point led to Disraeli's famous comment: "The peace of the world has on this occasion been preserved not by statesmen but by capitalists."

The history opens in 1755, when Meyer Amschel Rothschild, the founder of the firm, found himself left an orphan at the age of twelve with a small inheritance and his father's money changing business. The boy's work gave him an interest in coins. He became a competent numismatist and had dealings with a neighboring Royal collector, the Prince who was soon to become Elector of Hesse. The Elector was himself a man of business who laid the foundation of an immense fortune largely on the money poured out by the British Government for the hire of the troops of Hessian mercenaries which it was using against the revolt of the American colonists. Rothschild came in as a discounter of English bills paid for this export of cannon-fodder, and secured some small pickings out of his patron's large transactions and learned the three lessons which he was to transmit so successfully to his five sons—that crowned heads were the best customers, that exchange operations could be organized to yield a high profit, and that a client's business secrets must be kept. But his real chance did not come until the Napoleonic wars made Frankfort the financial center of Europe. When the Elector of Hesse fled before the French invasion Meyer Amschel subterraneously attended to his own interests, with the elaborate dissimulation of two sets of books, cipher messages, and letters transmitted in a coach with a secret drawer. But he also kept on good terms with the French authorities, bribed them and lent them money, while at the same time he carried on a huge trade in smuggled goods from Britain. The Rothschilds, as a French police report said, "were exceedingly wise and cunning." The whole

family toiled at the business; five sons became partners; an un married daughter sat at the cash desk assisted by the wives of two o the sons.

Meyer Amschel's adaptability enabled him to be on good term with the French masters of the Grand Duchy and to maintai relations with the refugee Elector. Count Corti dismisses as legend, invented by one of the old man's sons, the familiar story tha he saved the Elector's fortune at the expense of his own. On th contrary, his business so far prospered that at the end of the centur he sent his third son, Nathan, the genius of a gifted family, t establish a branch in England.

Nathan Rothschild settled first at Manchester, where he used hi capital to trade in cotton goods. A few years later he moved t London and became a British subject. The Peninsular War gav him his chance. The carelessness of the Home Government com pelled Wellington to raise funds by drawing bills on bankers i Spain, Sicily, or Malta. The bankers cashed them at a heav discount, and in due course collected them at par from the Britis Treasury. Nathan Rothschild found a better way.

He had acquired very cheaply a large proportion of the bil issued by Wellington and proceeded to cash them at the Britis Treasury. The cash which he thus received—generally in the for of guineas—he sent across the Channel to France, where it w received by one of his brothers, generally by James, but in 181 sometimes by Carl or Solomon, and then paid into various Par banking firms. The brothers obtained from the Paris bankers bil on Spanish, Sicilian, or Maltese bankers, and they contrived, throug their business connections to get these to Wellington, who du received them from the bankers.

Napoleon's Government was, of course, aware of this import bullion, but welcomed it as evidence that the Continental blocka was compelling Britain to send her gold instead of her goods, a the British Treasury, quickly realizing the advantages of Nath Rothschild's system, did business with him on a large scale. Cou

Corti estimates that between 1811 and 1816 he handled subsidies to the amount of about £20,000,000.

When in 1812 old Meyer Amschel died, so the legend goes, he called his sons round him and divided the world between them. The legend, as one reviewer of Count Corti's book points out, lies; Europe was already on the way to division, and at that moment only two sons were in Frankfort; Solomon was in Paris, Nathan in London, and James was in a small town on the French side of the Channel keeping up communications between the two. They had established their own news service, which was turned to such profitable use that Nathan could exploit the victory of Waterloo on the Exchange a day before it was known to the Government. They had cemented their alliance with the Elector of Hesse by a secret partnership with his financial adviser. Nathan had become the adviser of the British Treasury, and was arranging a great part of the subsidies to the Continental allies. Between 1811 and 1816 the Rothschilds handled half of the £42,500,000 paid in subsidies.

There can be no doubt of their extraordinary importance in the history of the time and the influence they exerted on Governments and politics. Here their power would be used (on terms) to suppress a revolution and bolster up the Metternichian reaction; there they would retain touch with Liberal movements, and prospect a means of escape when the deluge might come. Solomon in Vienna might seem to stand for Austrian tyranny, Nathan in London for British Liberalism, James in Paris might have his fingers on all the strings. Yet the brothers acted together at every point, a cynical power above Governments, and, adds one writer, "above any morality, except that of the punctual payment of obligations."

Whatever judgments we may pass on the early methods of the great house, we must remember the times in which they lived. If we condemn Reb Süss what shall we say of the Duke? "There was little to choose," says a commentator, "either morally or materially, in the relations between the French King and politicians and James and between Metternich and Solomon of Vienna." As the old re-

actionary exclaimed to Solomon when the Metternichian system wa on the verge of collapse in 1848, "If the devil fetches me, he wil fetch you too."

In some respects Count Corti's book fails to do justice to th Rothschilds. As one critic points out, "He takes it amiss that the made financial use of the early information which their enterpris enabled them to obtain, and is shocked that the house should profi by the fact that its own credit was better than that of the State' whose business it transacted. He does not in the least realize tha the house rose to power by substituting strict business methods fo haphazard dishonesty in an age when even the Austrian Goverr ment cooked its accounts; that its almost unerring financial instinc helped to set Europe on its legs again after the Napoleonic war nor even that its influence did much to ease the shock of the Revolu tion of 1830. Least of all does he seem to be aware that the fact which he has himself compiled and set out with all a historian precision and sincerity themselves contradict his narrow and unsym pathetic judgments." [27]

Never again can that kind of influence be exercised in that kin of way. If the dynastic stage of the banker's power has not con pletely disappeared, the monarchs have become more constitutiona Financial dynasts still exist, but they stand, not for their family even for their "house," but for a corporation. They, too, are at th mercy of markets, of public psychology and even of laws; economic forces becoming every day more impersonal.

The "power of finance" develops in other directions. Of late America it has done so by assuming managerial functions in th great industrial enterprises, particularly in certain public utilitie

That tendency, it is true, is presenting new problems in demo racy; we get the creation of an "unseen empire" which would enormously dangerous but for certain facts which will be explain presently.

CHAPTER X

PAPER MONEY EXPERIMENTS THROUGHOUT HISTORY

Paper is not the only form of money subject to inflationary and get-rich-quick devices, but the general introduction of paper money at the end of the seventeenth century marked the beginnings of a new type of experimentation with money and new ideas as to its nature; the abuse of note issue by private bankers quickly brought the realization that such functions were a public concern and should be controlled in the public interest. European society having advanced in the thirteenth century from a "natural" to a money economy was in the seventeenth century rapidly advancing from a money to a credit economy. Schemes like that of John Law's in France showed how easily the new development could get out of hand to a ruinous degree. The Bills of Credit of the British Colonies in America tell the same story. Some of the paper money devices took quaint turns as in the case of the French-Canadian "playing card money" which was current for nearly a century. The money of the Continental Congress and its collapse. Two typical cases of inconvertible paper money examined; why one failed and the other succeeded.

CHAPTER X

PAPER MONEY EXPERIMENTS THROUGHOUT HISTORY

In reply to the question "Why Gold?" a monetary authority once eplied: "Because you can't trust governments, least of all demo-ratic governments." And he went on to explain that it was not so nuch that governments or peoples are necessarily dishonest, as that he ordinary man, despite the great antiquity of this tool of money, as never managed to grasp one or two vital truths about its nature. One such truth is this: the essence of any method for maintaining ts value is to limit its quantity. With no limit, or only vague limits o its quantity, there can be no assurance of the maintenance of its alue. "There is no point more important," says Ricardo, "in issuing aper money than to be fully impressed with the effects that follow rom the principle of limitation of quantity. It is not necessary that aper should be payable in specie to secure its value, it is only ecessary that its quantity should be regulated."[1]

Yet again and again, as the record which follows shows, we get opular demands for paper money schemes from which this almost elf-evidently necessary proviso is omitted.

Money confusions have so prevented the general public from real-zing the point, that at every crisis where the device of paper money as available at all, governments have been pushed so to disregard it s nearly always to wreck the monetary machine. Ricardo, while ully admitting the theoretical feasibility of maintaining the value of aper money by limiting its quantity, adds that "Experience, how-ever, shows that neither a State nor a Bank ever has had the unrestricted power of issuing paper money, without abusing that power; in all States, therefore, the issue of paper money ought to be under some check and control; and none seems so proper for that purpose as that of subjecting the issuers of paper money to the

obligation of paying their notes, either in gold coin or in bullion." [2]

Writing a hundred years later in the light of the experience of the generations following Ricardo, generations which possessed a much more developed banking system, an American economist, Professor Moulton, confirms Ricardo's view.

"The striking feature," he says, "of the history of paper money is that once an issue is started it becomes well-nigh impossible to check an almost indefinite increase. Let the first step be ever so hesitant, when once it is taken other issues are likely to follow in rapid succession until the entire monetary system is demoralized. It is only in rare instances that issues have been controlled and kept within limits of safety.

"The effects of an issue of irredeemable paper currency have practically always been disastrous in the long run, resulting not only in a derangement of financial relations and general disruption of business, but also in unsettling the customary morality which lies at the very basis of modern commercial life. Rather than serving as a real aid in meeting the financial requirements of wars, in the end paper money has always greatly increased the total cost, and in many cases it has proved the undoing of the nation quite as much as have the cannon of the enemy. However, there have always been plausible excuses for such issues, short-time necessities usually proving of more importance than long-time considerations. But the history of such issues should teach a lesson of vital importance in connection with financial preparedness." [3]

The introduction of paper money marks a pregnant development of the money device, in that it renders possible an enormous elaboration of credit that would be impossible without it. In the twelfth or thirteenth century Europe emerged from the natural economy to a money economy. With the coming of paper in a systematic way towards the end of the seventeenth century, the money economy began to develop into a credit economy. And with every sharpening of the tool it became more dangerous to handle—more efficient in

expert hands, more dangerous in ignorant. Which is the way with most sharp instruments.

Before the day of paper, kings and governments inflated currency by debasement of coins, reducing the amount of gold or silver therein. Every one could see why this should reduce the value of the currency. That far understanding could get. But that the value of the coins would fall equally if the number were correspondingly great, whether of sound metal or not, seemed beyond understanding. (As when the failure fully to grasp it produced the Free Silver movement.) Of the two methods of inflation—by debasement or paper—paper has proved the more subject to confusion and illusion. In the case of currencies based on metal some limitation of quantity, even in the worst debasements, usually operated. In the case of paper all sorts of curious considerations came in to complicate the simple truth that an increase in the number of claims to a given quantity of wealth must reduce the amount which on settlement each claimant will receive; that the larger the number of units the less each unit will be worth.

Men argued, for instance, that if paper money passed because it represented something which existed to-day, it would pass equally well if it stood for something which would exist to-morrow—or might exist at some time. Again and again we find great states indulging in the wildest experiments, trying to put into effect the most fantastic schemes, beside which the dreams of the alchemists were matter-of-fact chemistry. Again and again we find men arising to proclaim that they have discovered the purse of Fortunatus, the philosopher's stone by means of which printing figures on bits of paper can summon wealth into being and provide a substitute for plowing and sowing and harvesting.

We will examine here a few of the outstanding cases, but before doing so, note the first attempts at paper money, or its equivalent in materials that antedated paper.

The plated coins of ancient Rome, described in an earlier chapter, were of course from a monetary point of view what a paper currency

would be to-day. Del Mar thinks that at a still earlier date Athens knew a legal tender, or what he calls a "numerary" money, fabricated of copper discs, highly overvalued. "They circulated concurrently with the commodity coin called the chalcus, just as the greenbacks of the United States circulate side by side with commodity silver coins of like denominations." He gives his reasons also for thinking that money mentioned in the Socratic dialogues was a legal tender currency approximating to modern paper. The passage in the dialogue runs: "The Carthaginians made use of the following kind (of money): in a small piece of leather, a substance is wrapped of the size of a piece of four-drachmæ; but what this substance is, no one knows except the maker. After this, it is sealed (by the State) and issued for circulation." [4]

The era of Æschines is fixed at B.C. 430-350. The "leather," says Del Mar, [5] "may be reasonably conjectured to have been parchment, and the mysterious substance either tin, or a compound of tin and copper, whose value arose from a specifically limited number of pieces in use; because the substance of which it was made was concealed from view and could only be ascertained—if at all—by perforating or removing the parchment enclosure, and thus rendering the pieces worthless."

"How long and under what circumstances," he adds, "this peculiar money lasted, we have no means of determining, but it probably went out of use within a half century after the gold and silver mines of Spain were opened, about B.C. 408, and regular supplies of these metals began to make their appearance in Carthage."

"The Carthaginians," he says, "then abandoned the numerary system which had served them so well, and in its place adopted the coinage of those glittering but delusive metals, whose pursuit was soon to lure them to national extinction."

Paper (felted) is said to have been invented in China, B.C. 177, and pasteboard notes were certainly used for money during the reign of Wu-ti, B.C. 140. The ancient Egyptians made a sort of paper from the leaves of the papyrus, but this was too flimsy for use as money.

Felted paper was first brought into Europe from Asia by Arabs bout the sixth century of our era, but no European manufactures f it were established until about the twelfth century, and it did not ecome common until the fifteenth century.[6]

In 1260-63 Kublai-Khan, then in command of the Mongol army f occupation, issued paper notes and introduced them into those arts of China which his forces had subdued. These issues soon ecame redundant and fell in purchasing power.

Between 1264 and 1290 a second series of notes were issued. "Like heir predecessors they were without specific limit as to numbers, nd thus became in time depreciated below the level of the coins fter which they were named, and for which the law compelled hem to pass in the payment of debts." Pauthier has given, from the Chinese annals of the Mongol dynasty, a complete table of the issues f paper money during every year of Kublai-Khan's reign (1260-94), stimated at their nominal value in *ting* or tens of silver taels. The owest (annual) issue was in 1267, of 228,960 taels, and the highest vas in 1290, of 50,002,500 taels, whilst the total amount in thirty-four ears was 249,654,290 taels. A tael really meant 1,000 copper "cash" r "chuen."

The depreciation first became rapid in 1287, when the emissions vere very extensive. Before this occurred the notes of the First ssue of 1260-63 had been exchanged at the rate of five for one of hose of the Second.

It is these notes of the Second issue that are described in the pages f Marco Polo.[7]

It was somewhat later (A.D. 1330), that the Moorish traveler, Ibn atuta, reached China, whose paper money is described in his itin- rary. Sir John Mandeville writes also of China at this period (about 327); but whether it is of the reigning monarch of that country or ne of his predecessors that he speaks in the following extract, is ncertain:

"This emperor maketh no money but of leather imprinted or of aper. And of that money is some of greater price and some of

lesser price, after the diversity of his statutes. And when the money hath run so long that it beginneth to waste (wear out) then men bring it to the emperor's treasury, and then they take new money for the old. And that money goeth throughout all the country and throughout all his provinces. For there and (even) beyond them they make no money neither of gold nor silver." [8]

During the last days of the Mongol dynasty, in 1351, an effort was made to reform the currency, "but by this time the evil lay too deep for remedy; for many kinds of paper money were in circulation—government, provincial, and private—besides many counterfeits; and the government was powerless to limit the circulation. The notes therefore continued to depreciate, and were retired from circulation." The new Ming notes read: "This paper money shall have currency and be used in all respects as if it were copper money!" [9]

Leather moneys were frequently employed during the Renaissance. Allusion having already been made to those of Philip I, 1060–1108; the Doge Michieli, 1122, and Frederick II, 1237, it will only be necessary to mention these.

An emission of pasteboard tablets about the size of a silver dollar and stamped with somewhat similar designs, was tried in Leyden during the struggles of the Dutch for freedom.

The origin of paper money as a force in economic life must be of course be sought, not in the action of states but in that of bankers.

The first bank notes properly speaking which were known in England were the acknowledgments made to private depositors by the old goldsmiths. These acknowledgments could pass freely from hand to hand, and as they were portable, and could be easily traced and were usually of no value to the ubiquitous highwaymen, were found to be convenient instruments for trade. Some goldsmiths issued notes far in excess of the money they held, and were able to carry on a business by their credit.

But these instruments were linked closely to the state money, to metallic currency, that is, perpetually changing in value, and were a measure subject to all the confusions, illusions, misunderstandin

and vicissitudes to which the government money was exposed. The device did nothing to break down the "money illusion." But there was an earlier commercial device which preceded, as we know, even coined money, and was related much more nearly to real wealth as distinct from money.

In the course of trade a claim is expressed and acknowledged in a document which can be transferred. The holder is entitled to receive a certain sum, or certain goods on a certain date. Such a document almost inevitably becomes a means of facilitating exchanges and we know that the use of such documents—mainly in the form of bills of exchange—long antedated government paper money. The ordinary trader's promise to pay led the way to the promise to pay by the banker who dealt in these documents—the Bank Note, which rested, not on the state but on the repute of the issuer. Such a medium of exchange—titles to actual goods specifically designated for the purpose of exchange—was a form of money which, had it become dominant in trade to the exclusion of state money might have developed into something more scientific than the money we have actually known. We saw in the last chapter how in the early stages of Banking, "bank money" was called in to correct the vagaries of the State product. But at the stage when Bank Money began to take the form of the Bank Note it became, owing to the control (it may be necessary control) exercised by governments over banks and to the fact that banks were in many cases the agents by which what was virtually state money was issued, mixed up with the state money, "legal tender," silver, gold, whatnot, so that the growth of banking at first, at least, added to the general confusion about money.* It thus came about that in the early stages

* Professor Lehfeldt, in his book on "Money," says:

"The world contains a quantity of real wealth—fields, houses, ships, machinery, stocks of corn, and so on. These, however, are unwieldy things to transfer, and consequently it has been found convenient to create a second, or representative, world of titles to real wealth—title-deeds, mortgages, debentures, shares, bills of exchange, and the like. Not all real wealth is so represented; furniture and clothes are not, except in rare instances, but much the larger portion is, and thereby attains a degree of negotiability that was

of the development of paper money we find even astute bankers like Law, either sharing popular confusion or unscrupulously trading on it, and adventuring into most fantastic schemes.

It is an interesting fact in this connection that, contrary to our expectations of what would seem to be the natural order of things, note-issue preceded deposit business as a banking function. Bagehot cites the facts from the history particularly of Scotch, French and German banking of the eighteenth century and later, and explains them. "The reason why the use of bank paper commonly precedes the habit of making deposits in banks is very plain. It is a far easier habit to establish. In the issue of notes the banker, the person to be most benefited, can do something. He can pay away his own 'promises' in loans, in wages, or in payment of debts. But in the getting of deposits he is passive. His issues depend on himself; his deposits on the favor of others. And to the public the change is far easier too. To collect a great mass of deposits with the same banker a great number of persons must agree to do something. But to establish a note circulation, a large number of persons need only *do nothing*. They receive the banker's notes in the common course of their business, and they have only *not* to take these notes to the banker for payment. If the public refrain from taking trouble, a paper circulation is immediately in existence. A paper circulation is begun by the banker, and requires no effort on the part of the

unknown in earlier times. Wealth is not, in this way, increased in amount, but it is rendered more available in case transfer, *i.e.*, trade, is desired.

"Since not even debentures or bills of exchange possess that universal acceptability which constitutes money, a second state of abstraction has been created out of the first. Banks have been instituted whose financial standing is so good that their credit comes to constitute credit-money. But bank credit is not created out of nothing; it is derived from the real wealth belonging either to the shareholders or the customers of the bank. The process varies in detail, as appears from the variety of assets held by the bank. The the shareholders' capital may be used to buy stocks or bills of exchange; deposits may be used in the same way, and other deposits may be constituted by loan, on the security of stocks or bonds pledged by the customer; but the essence of the matter is that a portion of the wealth existing under the form of negotiable paper is re-represented in the form of credit-money. And whereas the stocks and bills are not generally enough acceptable to serve as a means of payment, this emanation of value derived from them is. (p. 100)

ublic; on the contrary, it needs an effort of the public to be rid of otes once issued; but deposit banking cannot be begun by the anker, and requires a spontaneous and consistent effort in the ommunity. And therefore paper issue is the natural prelude to eposit banking." [10]

But the right of issue was grossly abused.

We find from Ellis Powell's "Evolution of the Money Market," hat "any person, however impecunious, could start a 'bank,' and down to 1775 at all events) issue notes purporting to be payable on emand. Every grocer, draper, tailor, and haberdasher who chose night flood the country with his 'miserable rags.'" [11] "In one in-ance a bank was started by four partners, who subscribed capital to he extent of £500 each; in a few months they had a note issue of early £14,000, and, in twenty years, whilst their capital had risen o £8,000, their note issue had expanded to £180,000. The only egal restriction imposed on the country banks was that in 1775 notes elow the value of twenty shillings were prohibited, and after 1777 o notes could be issued for a smaller sum than five pounds. Every ountry banker had a London agent, and about 1790 many bankers llowed their bills to be cashed either in London, through their gents, or at the place of issue; and as a result so much country oney was poured upon London tradespeople that country notes ecame discredited and in the crisis of 1793 about one hundred ountry banks stopped payment and three hundred were seriously haken." [12] Banking was an exciting business in those days, both for ankers and the public. Most people have heard how Jonathan ackhouse drove from London to Darlington in a chaise full of gold o meet a threatened run on his bank at Darlington, how a wheel ame off on the way, how Jonathan piled the gold at the back of he chaise, and so "balanced the cash" and galloped into Darlington n three wheels. An interesting point in the story is that mentioned y Mr. Maberly Phillips in his "History of Banks, Bankers, and anking"—namely, that the threatened run was deliberately organ-

ized by Lord Darlington, owing to some disagreement between hin and the banker.

Earlier in the century, at the end even of the previous century governments themselves had taken a hand in the game of manufac turing paper money as merrily as any individual adventurer. Severa of the provincial governments in America had been issuing pape money of various kinds including tobacco and rice notes. And thei experiments were to play a part in giving rise to one of the mo astounding "sky blue" money ventures ever entered upon by a grea power. This was the famous "system" of John Law.

At a moment when French finances had fallen into apparentl irremediable chaos there appeared in Paris a certain Mr. John Lav a Scotchman, and the son of an Edinburgh goldsmith (that is to sa also a banker). He seems to have been wild and roving, and h life in London ended dramatically, when he was arrested for killin his opponent in a "love duel" in Bloomsbury-square. He fled t Holland, where the industrious Dutch, with their banks, loans, an financial schemes, stimulated his genius, and he conceived the ide of his famous "system."

His roving had also led him to America, and he had the learnt something of the banking schemes of early colonial time In 1705 he had published a work in Edinburgh on banking, entitle "Money and Trade considered." In this work, after discussin certain principles of money, he held that it was feasible to establi and continue a bank of issue whose emission notes should "founded" not upon a reserve of coins, but upon the possession land. "Land indeed is the value upon which Mr. Chamberlain rival schemer) founds his proposal and 'tis upon land that I fou mine." He proposed to calculate the value of the fee-simple of la at twenty years' purchase, to issue notes to that amount, and advan them to the owner of the land. "An acre of land rented at two bo of victual, the victual at £8 and land at twenty years' purchase, equal in value to £20 and may be made money to that value, it has all the qualities necessary in money."

His book attracted some notice, but had no practical effect, and Law again betook himself to travel. He visited Brussels, Paris, Vienna, Genoa, Rome, making large sums by speculation, and spending them lavishly. He was in Paris in 1708, making some proposals to the government as to their financial difficulties, but Louis XIV declined to treat with a "Huguenot," and d'Argenson, chief of the police, had Law expelled as a suspicious character.

He returned later and lived an extravagant life supported entirely by his wits at the gaming-tables. His handsome person—Belle's portrait in the National Portrait Gallery shows a refined and intellectual face—and cultivated manners impressed kings and governments in Brussels, Paris, Vienna, and Rome.

His "system," however, for the reëstablishment of Europe's finances was not so fortunate. Louis XIV had declined it, and it was not until the Regent, Orleans, was in power that Law had a chance. France was in financial chaos, bankruptcy was lightly talked of as a way out, and the distracted Regent listened to Law.

Whether Law really believed in his own schemes it would be difficult to decide. He had seen land banks work successfully in America, where, however, he had not remained long enough to see them fail. In the country where his scheme was first published, the Bank of Scotland had issued notes to the amount of four or five times its coin resources without bad consequences. It was therefore but natural that he should have imagined that these instances of paper issues exemplified an inherent principle of money, that this principle was security of redemption in some kind of property, and that this being provided for, the issues might go illimitably.

Such a doctrine was plainly one which the French Regent, harassed by financial difficulty, would find singularly attractive. Law's views were, in fact, greeted by the government, and he was accorded permission to establish a bank upon the principles he had laid down.

By an edict of 2nd of May, 1716, a private institution called *La Banque générale,* and managed by Law, was founded. The capital

was 6 million livres, divided into 1,200 shares of 5,000 livres, payabl in four instalments, one-fourth in cash, three-fourths in *billets d'eta* It was to perform the ordinary functions of a bank, and had powe to issue notes payable at sight in the weight and value of the mone mentioned at day of issue. The bank was a great and immediat success. By providing for the absorption of part of the state pape it raised the credit of the government. The notes were a most desi able medium of exchange, for they had the element of fixity c value, which, owing to the arbitrary mint decrees of the goverı ment, was wanting in the coin of the realm. They proved the mo convenient instruments of remittance between the capital and th provinces, and they thus developed the industries of the latter. Th rate of interest, previously enormous and uncertain, fell first to 6 an then to 4%; and when another decree (10th April, 1717) ordere collectors of taxes to receive notes as payments, and to change the for coin at request, the bank so rose in favor that it soon had a not issue of 60 million livres. Law now gained the full confidence of th regent, and was allowed to proceed with the development of th "system." [13]

On the 4th of December, 1718, the bank became a governmer institution under the name of *La Banque royale*. Law was directc and the king guaranteed the notes.

The system was not complete; but it had already begun to deca In December, 1719, it was at its height. The shares had th mounted to 20,000 livres, forty times their nominal price. A sort madness possessed the nation. Men sold their all and hastened Paris to speculate. The population of the capital was increased an enormous influx of provincials and foreigners. Trade received vast though unnatural impulse. Everybody seemed to be gettir richer, no one poorer. Those who could still reflect saw this pr perity was not real. The whole issue of shares at the extreme m ket-price valued 12,000 million livres. It would require 6 million annual revenue to give 5% dividend on this. Now, t whole income of the company as yet was hardly sufficient to p

5% on the original capital of 1,677 million livres. The receipts from the taxes, etc., could be precisely calculated, and it would be many years before the commercial undertakings of the company—with which only some trifling beginning had been made—would yield any considerable return.

In order to prolong public confidence Law sought for new powers and privileges. In August, 1717, the bank had organized under its auspices a mining and colonization scheme entitled the "Compagnie des Indes Occidentales," or West India Company, better known as the Mississippi Scheme. The capital [14] of this concern was 100 million livres, 200,000 shares of 500 livres each receivable one-fourth in coins, and three-fourths in "billets d'etat," a new form of State notes which the Regency had issued, and whose value in coins had already depreciated. The company had obtained from the Crown a grant of the Province of Louisiana, which, it was said, was filled with gold and silver and precious stones, and parties of colonists were formed in Paris to explore this favored land, and transport its treasures to France. A few adventurers of the better classes, together with a mob of outlaws, vagrants, and abandoned women, were got together and shipped to Louisiana. After founding the city of New Orleans, and leaving part of their number to guard the settlement, they started out, after the Spanish example, to enslave the Indians and work the mines. As the Indians were able to defend themselves, and there were no mines, the entire project failed.

Meantime Law had been made "Duke of Arkansas," and flung titles to a host of retainers. He fought enemies in high places, and juggled like a master-magician with shares, premiums, instalments and issues. He outbid a rival company for the national monopolies, and gradually drew into his "system" the whole fiscal administration.

At a furious rate he remodeled everything. He revived the fisheries, built bridges and canals and asylums for the poor, and took steps to make Paris a seaport. He deprived greedy clerics of their

lands, and at the time of his downfall was about to abolish tolls and reduce import duties.

Europe had never witnessed such vast transactions. The bank presses poured out the notes, the public rushed to buy, the price soared, and Paris went mad with excitement. All the gamblers and tricksters of Europe flocked to the Rue Quincampoix, and some fabulous fortunes were made.

But the "system" was doomed. People began to sell their shares and to buy coin, houses, land—anything that had a stable element of value in it. There was a rapid fall in the shares, a rapid rise in all kinds of property, and corresponding depreciation of the paper money. A large proportion of the coined money was removed from the kingdom. Prices rose enormously. There was everywhere distress and complete financial confusion. Law became an object of popular hatred. He lost his Court influence, and was obliged to consent to a decree (21st May 1720) by which the notes and consequently the shares were reduced to half their normal value. This created such a commotion that its promoters were forced to recall it, but the mischief was done. Law was removed from his office, and his enemies proceeded to demolish the "system." A vast number of shares had been deposited in the bank. These were destroyed. The notes were reconverted into government debt, but there was first a *visa* which reduced that debt to the same size as before it was taken over by the company. The rate of interest was lowered, and the government now only pledged itself to pay 37 instead of 80 millions annually. Finally the bank was abolished, and the company reduced to a mere trading association. By November the "system" had disappeared. With these last measures Law, it may well be believed, had nothing to do. He left France secretly in December, 1720, resumed his wandering life, and a lottery scheme drew him to Venice where he died poor and forgotten, on the 21st of March, 1729.

So little does experience seem to teach in these matters that in the very year of Law's dramatic failure. The British Government es

poused and pushed, as a means of paying off the National Debt and as an alternative to the methods of assistance then furnished the government by the newly established Bank of England, which had political enemies, a scheme even wilder than Law's. This was the famous South Sea Bubble. The company offered to take over all the debts of the State, estimated at £30,981,712, receiving interest at the rate of 5 per cent before 1727 and 4 per cent after that date; it also undertook to pay the government a lump sum of £3,500,000, which was afterwards raised to £7,500,000, and in return, further trade privileges were granted to it. Moreover, it was to become the sole State creditor, as the funds of the Bank, the Exchequer, and the East India Company were to be incorporated with its own funds. An orgy of speculation followed. Smollett tells us that "the whole nation was infected with the spirit of stock-jobbing to an astonishing degree. All distinctions of party, religion, sex, character and circumstances were swallowed up in this universal concern, or in some such pecuniary project. Exchange Alley was filled with a strange concourse of statesmen and clergymen, churchmen and dissenters, Whigs and Tories, physicians, lawyers, tradesmen, and even with multitudes of females. All other professions and employments were utterly neglected, and the people's attention wholly engrossed by this and other chimerical schemes, which were known by the denomination of bubbles. New companies started up every day under the countenance of the prime nobility. . . . About a hundred such schemes were projected and put into execution, to the ruin of many thousands. The sums proposed to be raised by these expedients amounted to £300,000,000 sterling, which exceeded the value of all the lands in England. The nation was so intoxicated with the spirit of adventure that people became a prey to the grossest delusion."

The London Journal for June 11, 1720, shows the extent to which this commercial lunacy was carried. "The hurry of our stock-jobbing bubblers has been so great this week that it has exceeded all that was ever known. There has been nothing but running about from

one coffee-house to another and from one tavern to another, to subscribe without examining what the proposals were. The general cry has been, 'For G—'s sake, let us subscribe to something, we don't care what it is!' So that, in short, many have taken them at their words, and entered them adventurers in some of the grossest cheats and improbable undertakings that ever the world heard of; and yet by all these the proprietors have got money and have had their subscriptions full as soon as desired."

The shares of the South Sea Company fell disastrously, and in the resulting panic the Bank of England was empowered to take over the company's bonds in a general scheme of liquidation designed to restore confidence and credit.

Incidentally this marked the final triumph of the Bank of England as the Bank of the Government and a nascent Central Bank, over the schemes of its political rivals. It was at first the only joint stock bank permitted, but goldsmiths and indeed any tradesmen were permitted to issue bills, with the result that the country was flooded with paper money of no certain value, in the way already described. Legislation necessarily followed, and bit by bit the money apparatus and the whole banking function was coördinated and brought under the public control with which we are familiar to-day.

It is suggestive that Law acquired some of his financial ideas from residence in the American colonies which did not lag behind Europe at all in the rather reckless use of this new tool of paper money.

For the most part, the original settlers of the New World were poor men who had been willing to change their surroundings and mode of living in the hope of economic betterment. They did not bring money with them in large quantities, and from the very outset this lack of a sufficient quantity of specie or other currency to drive their humble trade was felt as one of the chief hardships. The development of industry and trade in the colonies proceeded much faster

than the development of a system of payments to finance it. At first, barter was used quite extensively, but the inconveniences of this system soon led to the selection of certain articles as standards of value, in terms of which all other goods were measured. In the South, tobacco and rice were so used; in the Atlantic Seaboard States, furs, corn and cattle were the chief standards. The Indians along the seacoast used wampumeage.

But this system, or lack of system, was obviously much too cumbersome to last for long. It is not surprising, in view of the scarcity of a circulating medium, that the enterprising colonists should follow the example of their European progenitors and attempt to use their credit as currency and wealth.

In 1686, when the colonial government of Massachusetts granted a charter to a private bank that had been in existence since 1681, it gave as its reason for this step "the great decay of trade, obstructions to manufactures and commerce in this country and multiplicity of debts and suits thereupon, principally occasioned by the present scarcity of coin." In 1690, when financial difficulties had been temporarily increased by the failure of Phipps's expedition to Canada, which had cost Massachusetts £50,000, the General Court of the colony issued, for the first time, government bills of credit to the value of £7,000 in denominations between 5s. and £5, again giving as its reason "the present poverty and calamities of this country, and through scarcity of money, the want of an adequate measure of commerce." In 1692 these bills were made legal tender for all payments, and, as a bonus of 5 per cent was given on them when they were paid into the public treasury, they remained at par with coin for about thirty years. Paper money continued to be issued from time to time in anticipation of the taxes both in Massachusetts and in other colonies as well.

"No adequate provision for redemption was made, but when they were thoroughly discredited notes would be redeemed at a small percentage of their nominal value and new issues would be made, and as a result people were everywhere beginning to lose faith in

paper currencies."[15] Notes, though they were only legal tender in the colony that issued them, were generally current in other colonies as well; and between the years 1712 and 1749 there was in practice a single paper currency throughout New England, subject to a more or less uniform rate of depreciation, and practically irredeemable. As a result of excessive paper issues prices began to rise. The accounts kept by a colonial clergyman show to what an extent the evil had gone; goods, he said, that could be purchased forty years earlier for £1 10s. 10d., in 1747 cost £15 2s. 6d. in paper money; wheat had risen from 5s. to 21s.; Indian corn from 3s. to 20s.; beef from 2½d. to 1s. 6d. per pound; shoes from 5s. to 60s., etc. The depreciation was most rapid in Rhode Island, where the ounce of silver that was formerly valued at 8s., rose in 1715 to 12s., and in 1739 to 26s.; in Massachusetts bills to the nominal value of 16s. would not exchange for more than 5s. in coin, and for a time the colony was forced to go back to produce payments. In the southern colonies the same movement was going on.

Dr. Douglas estimates in his "Historical Summarization of New England" that in 1748 more than £2,500,000 worth of paper money was in circulation in Massachusetts. Prices were high, debtors demanded more currency, and the normal vicious circle of high prices more money and higher prices was in full swing.

There were three main causes for the issue of colonial bills of credit: (1) war expenses; (2) loans to individuals; (3) ordinary expenses of government. There were other pretexts. One of the most common was the replacement of old and worn bills, which always left a margin over for general expenses, and sometimes a very large margin.

Colonial bills of credit were of several different kinds, viz., (1) interest-bearing, not legal tender (which made them objectionable enough in form); (2) the same, legal tender for the principal and sometimes for the interest also; (3) non-interest bearing, legal tender for all purposes; (4) the same, legal tender for future but not for

past debts; (5) the same, not legal tender between private persons, but receivable for all public dues.

Interest-bearing bills were soon abandoned and the tendency in all the colonies was to make the bills legal tender for all purposes. "But for the restraints imposed by the mother-country probably all would have been legal tender for all purposes, and the issues would have been much larger in amount than they were." [16]

The usual course of events where bills of credit were issued (but with some variations) was as follows: (1) emission; (2) disappearance of specie; (3) counterfeiting; (4) wearing out of bills; (5) calling in and replacing worn and counterfeited issues with new ones; (6) extending the time for old ones to run, especially those that had been placed on loan; (7) depreciation; (8) repudiation of early issues in part and the emission of others called "new tender."

But the British Government became uneasy at the rapid depreciation of the currency and its instability, and in 1720 a law was passed prohibiting the issuance of bills of credit for any but absolutely essential government expenses. For a while this law caused a painful deflation, and serious resentment against the Mother Country. So much so that the measure was largely ineffective and in 1751, the British Parliament passed a new restrictive bill, this time prohibiting the further issue of legal-tender bills of credit by the New England States; in 1764, the restriction was extended to all the Colonies. Non-legal tender notes could still be issued in anticipation of taxes. According to Franklin's testimony, this restriction was devised to ratify the greed of the handful of creditors. "On the slight complaint of a few Virginia merchants," he wrote, "nine Colonies have been restrained from making paper money, become absolutely necessary to their internal commerce, from the constant remittance of their gold and silver to Europe." This act on the part of the British Parliament was universally considered a quite unjustifiable interference in local matters and was deeply resented. Nor was the act entirely effective in doing away with the use of the paper money. In 1774 between $10,000,000 and $15,000,000 worth of it was in

circulation. It is not surprising then, that when the crisis came in the following year, the colonists fell back upon paper currency as the chief method of financing the war.

In some sense "hard" money became associated with Toryism, Monarchism, and oppression, and paper money with Democracy, Freedom, and the Rights of the People. Mr. Bryan, in 1896, in accusing his opponents of Anglomania and "corruption by the Money-Lords of Great Britain," was running true to type.

Almost the first step that Congress took after hostilities began was to sanction an issue of paper money. A week after Bunker Hill, the emission of $2,000,000 worth of bills of credit was authorized. The lesson of the depreciation of the colonial paper currency had evidently not been well learned. But what was the Continental Congress to do? It was a more or less makeshift body, without power or desire to impose taxation on a people in revolt partly against taxation, without obvious borrowing facilities, and it naturally seized upon the first thing at hand—the printing-press. Between 1775 and 1779 Congress issued about $240,000,000 in bills of credit.

While the notes were issued in moderate amounts, the depreciation was not great; there was in fact no depreciation until 1777. But when the inevitable effect on prices was felt, the need for more money became pressing and a democratic Congress saw no alternative but to respond to the demands of the people—and speed up the rate of inflation. It was found that members of Congress could not spare sufficient time to sign all the bills issued and some dozen of men were hired for that purpose.

If ever it were possible to save a currency from depreciation by government decree, the continental currency would have been saved. Every conceivable sanction—from an appeal to patriotism to a threat of punishment—was invoked in the attempt to make the currency pass at par; but again the immutability of certain fundamental economic laws and the irrelevance of legislative dicta and decrees was demonstrated. The will of the Continental Congress to the

contrary, notwithstanding, the paper currency depreciated, and depreciated badly. The methods by which Congress and the various state assemblies attempted to impart an intrinsic value to the bills which they did not contain can only be suggested at this point. In January, 1776, Congress passed the following:

> Resolved, therefore, that any person who shall hereafter be so lost to all virtue and regard for his country, as to refuse to receive said bills in payment, or obstruct or discourage the currency or circulation thereof, . . . shall be deemed, published and treated as an enemy in this country and precluded from all trade or intercourse with the inhabitants of these Colonies.

Obviously, people who refused to accept these notes at their full face value were, by the operation of this law, made outlaws.

In spite of this and similar laws in the several states, depreciation proceeded apace. In 1779 one paper dollar was worth only two or three cents in specie. The attempts to regulate its value had been absolutely futile; to this day there is no term in the American vocabulary so expressive of contempt as "not worth a continental." In the autumn of 1779, Congress was horrified at the thought of repudiation and declared such a course unthinkable; six months later, it provided for redemption at the rate of 40 paper dollars to one "hard" or silver dollar—a repudiation of 97%.

The monetary chaos that prevailed during this period challenges portrayal. People with fixed incomes were, as is usual during a debauch of inflation, the chief sufferers (the whole relationship of economic classes was altered); debtors pursued creditors and forced them to accept payment of their loans, a queer phenomenon indeed.

In some states the currency issued by local institutions had depreciated even more than had the continental notes. In Virginia, notes finally passed at the rate of 1,000 to 1 and a person could purchase a tolerably good pair of shoes for $5,000. To buy a dress and a hat for one's wife as well, one must needs have been a millionaire. According to a contemporary account,

Barber shops were papered in fact with the bills, and sailors, on returning from their cruises, being paid off in bundles of this worthless paper money, had suits of clothes made of it, and with characteristic lightheartedness turned their loss into frolic by parading through the streets in decayed finery.

The moral consequences of the issue of these bills were no less serious than the economic. According to Pelatiah Webster, who lived at the time of the Revolution, "the fatal error, that the credit and currency of the Continental money could be kept up and supported by acts of compulsion, entered so deep into the mind of Congress and of all departments of administration throughout the States that no considerations of justice, religion, of policy, or even experience of its utter inefficacy, could eradicate it; it seemed to be a kind of obstinate delirium, totally deaf to every argument drawn from justice and right, from its natural tendency and mischief, from common sense, and even common safety."

The outcome has been described by a writer of the time, who might be telling the story of the war inflation of the European belligerents of our own day.

"The aged who had retired from the scenes of active business, to enjoy the fruits of their industry, found their substance melting away to a mere pittance, insufficient for their support. The widow who lived comfortably on the bequests of a deceased husband experienced a frustration of all his well-meant tenderness. The laws of the country interposed, and compelled her to receive a shilling where a pound was her due. The blooming virgin who had grown up with an unquestionable title to a liberal patrimony was legally stripped of everything but her personal charms and virtues. The hapless orphan, instead of receiving from the hands of an executor a competency to set out in business, was obliged to give a final discharge on the payment of 6d. in the pound. In many instances the earnings of a long life of care and diligence were, in the space of a few years, reduced to a trifling sum. A few persons escaped these affecting calamities, by secretly transferring their bonds, or flying from the presence or neighborhood of their debtors. A ho

or two would pay for a slave; a few cattle for a comfortable house; and a good horse for an improved plantation. A small part of the productions of a farm would discharge the long-outstanding accounts, due from its owner. The dreams of the golden age were realized to the poor man and the debtor, but unfortunately what these gained was just so much taken from others." [17]

After 1780 the depreciation of the currency was more rapid than ever, and in 1781 it ceased to act as currency at all. At the end of the war there was a distinct reaction against any further issue of bills of credit. The indescribable chaos had changed the attitude of large sections of the public, and the "cheap money" champions had little say in the drafting of the constitution. That document denied any state the right to coin money, issue bills of credit, or make anything but gold or silver legal tender. Soon the worthless continental and state fiat currency disappeared.

Any account of paper money devices on the North American continent should include some account of surely the strangest form of paper money that the history of responsible states records. It is a story which historians have not, so far as this present writer is aware, deigned to note; and the facts here given are taken from the documents collected by the Canadian government and so admirably edited and interpreted by Mr. Adam Shortt of the Department of Canadian Archives. Yet it is a piquant history not without its lessons for the student of monetary experiment.

The money referred to is that made from playing cards, a money which for generations formed at times the chief currency of Canada. It lasted in one form or another from 1685, the date of the first issue, until well past the middle of the eighteenth century; and though again and again efforts were made to suppress this form of currency, we find as late as 1749 ordinances increasing the issue to a million livres.

It would take a large volume even to summarize the documents which accumulated during the best part of a century relating to this "monnaie de carte." Kings came and went in France, but the card

money went on, despite reproofs of the home government. Photographs of some specimens of this card money are here reproduced.

The story in brief is this: In 1685 the intendent of Canada was awaiting funds. Meantime, the colony, and particularly the troops, were in dire need of money. An issue of paper currency seemed to be called for. But the colony was not at that date equipped with paper and printing machinery for the production of notes. The intendent must have been an ingenious proconsul (his letter produced below with its reference to "not knowing to what saint to pay my vows" would seem to hint that he might be a witty and rather cynical one). He requisitioned all the packs of playing cards possessed by the troops and having the amount each represented written on its face and signed by himself, he produced a form of paper money difficult to forge, resistent, well adapted to the needs of the occasion. It became exceedingly popular and remained current during the whole of the remainder of that century and the first half of the next.

The letter in which De Meulle makes his report to the home government is as follows:

Quebec, September, 24, 1685

My Lord—[18]

. . . . . .

I have found myself this year in great straits with regard to the subsistence of the soldiers. You did not provide for funds, My Lord, until January last. I have, notwithstanding, kept them in provisions until September, which makes eight full months. I have drawn from my own funds and from those of my friends, all I have been able to get, but at last finding them without means to render me further assistance, and not knowing to what saint to pay my vows, money being extremely scarce, having distributed considerable sums on every side for the pay of the soldiers, it occurred to me to issue, instead of money, notes on cards, which I have had cut in quarters. I send you, My

Lord, the three kinds, one is for four francs, another for forty sols, and the third for fifteen sols, because with these three kinds, I was able to make their exact pay for one month. I have issued an ordinance by which I have obliged all the inhabitants to receive this money in payments, and to give it circulation, at the same time pledging myself, in my own name, to redeem the said notes. No person has refused them, and so good has been the effect that by this means the troops have lived as usual. There were some merchants, who, privately, had offered me money at the local rate on condition that I would repay them in money at the rate in France, to which I could not consent as the King would have lost a third, that is, for ten thousand ecus he would have paid forty thousand livres; thus personally, by my credit and by my management, I have saved His Majesty thirteen thousand livres.

. . . . . .

(Signed) De Meulle

Quebec, 24th September, 1685.

In 1690 part of the government supplies sent to Canada having been lost in transit, the intendent with the approval of the governor again resorted to the issue of cards. In view of the dearth of metallic currency and the already established credit of the cards, the new issue was readily accepted and immediately passed into circulation.

Following the issue of the card money in 1691, for which no specific redemption was provided, there were several other issues made from time to time, unauthorized and not reported to the home government which strongly disapproved of so easy a means of incurring indefinite provincial debts. Though the cards continued to be readily accepted, secondary consequences of this increase of money without a corresponding increase in goods were soon revealed, especially in the rapid rise in prices, but with a distinction on the part of the importing merchants between prices in cards and prices in

coin, the former steadily rising above the latter. This was not from any fear that the cards might not be redeemed, but at best their redemption awaited the receipt of supplies of coined money from France, which coming late in the year, were not always available for remission in time to procure supplies until the following year. Recognizing these consequences, and the increasing disadvantage to the troops, whose whole subsistence depended on the card money, the governor and intendent proposed a more extended issue, in advance, of bills of exchange on the Imperial Treasury, which they might sell to the merchants for cash before the departure of the vessels in the autumn. Anticipating approval of their recommendation Champigny, supported by Frontenac, sold to the merchants in the autumn of 1691, bills of exchange to the amount of 200,000 livres and asked authority to continue that practice for the future. This led at once to lower prices for military supplies and avoided the risks of sending specie overseas.

The correspondence about this card money went on for years: the home government in Paris always objecting, the colonial government defending the device. We find later intendents making a general defense of card money. One (1706) maintains that it relieved the King from the necessity of sending coined money to Canada and thus depleting the supply in France. It also eliminated the risk of loss in transit by shipwreck or capture. It also prevented the sending of specie from Canada to the English colonies where supplies could be furnished cheaper than in France. Moreover, as the cards were worthless in themselves, entirely depending for their credit upon the good will of the King, they obviously tended, from motives of self-interest, to keep the people of the colony attached to the Crown. "It was true that the people of Canada had to pay more in this currency than in coined money for their supplies from France, but when the whole kingdom was in distress it was only fair that the Canadians should share in the sufferings and disadvantages."

Later in the year, the governor and intendent, replying specifically o the remonstrance and orders of the minister, promised to issue no more card money and to redeem as soon and as far as possible he outstanding issues, beginning with those of Champigny. Pending this process they urged the necessity for replacing the vornout cards by new ones, but only to the same amount as that vithdrawn. In replying, the minister demurs to the continued irculation of any of the card money. He urges its continuous redemption, but agrees to the replacement of the old and worn cards by new ones.

It suffices to add that forty years after this date the biggest issue of card money of all was made.

One or two paper money experiences of the states while they still retained the power to issue Bills of Credit are more than ordinarily nstructive for a variety of reasons.

With all the experience of the Revolutionary finance before them tate after state persisted in the belief that "more money" would ure their troubles in the disastrous efforts to apply the remedy.

One of the most instructive of all efforts to found a practicable land money"—money that is "founded on land," was that made by Rhode Island just at the close of the Revolutionary War. It is nteresting because the attempt was thoroughgoing, the conditions vere not too disorderly, and the facts are completely available. For hese reasons it is worth while giving the history at some length ince it is a type or microcosm of most of such efforts, and has a esson which, it would seem, is learned with exceeding difficulty nd reluctance.

The account which follows is condensed from one given in the *Century Magazine:* [19]

At the close of the Revolutionary War the people of Rhode Island found hemselves in extreme poverty and heavily burdened with their share of the national debt. The war had seriously crippled their trade, upon which they

were mainly dependent, and in their distress the people, instead of patiently waiting for relief to come by the slow process of rebuilding their trade, turned to paper money for relief. They began to clamor for a paper bank in 1785 and when petitions for such a bank were rejected by the General Assembly a new party was organized with paper money as its chief principle. They went before the Assembly again in 1786, and their petitions for a paper bank were met with counter-petitions against it, signed by the merchants of Providence, and the project was defeated again by a vote of two to one. They then carried the question into the elections and won a surprising victory gaining control of the General Assembly by a large majority. This body assembled in May, 1786, and one of its first acts was the passing of a law establishing a paper-money bank of one hundred thousand pounds.

Every farmer or merchant who came to borrow money must pledge real estate for double the amount desired. The money was to be loaned to the people upon this pledge according to the apportionment of the last tax, and must be paid into the treasury at the end of the fourteen years. Great expectations were entertained by the farmers of the beneficent results which were to follow upon this new influx of wealth.

The depreciation of the new money began literally with its issue. Every merchant and tradesman in the State refused to receive it for its face value and the holders of it refused to make any discount. The General Assembly came to the aid of the bank and sought to give its paper money full value by statutory enactment. A forcing act was passed subjecting any person who should refuse to take the bills of payment for goods on the same terms as specie, or should in any way discourage their circulation on such terms to a fine of one hundred pounds and to the loss of his rights as a freeman. This made matters worse than ever. Merchants and traders refused to make any sales whatever, many of them closing their shops, disposing of their stock by barter, and going out of business. In fact, money almost ceased to circulate at all. Nearly all kinds of business were transacted by barter, rents were paid in grain and other commodities, and the only people who used the paper money were those who had borrowed it on their land. The chief cities of the State, Providence and Newport, presented a very remarkable spectacle. Half their shops were closed, their inhabitants idle, and the streets animated only by groups of angry and contentious men blaming one another for the blight which had fallen upon their business and industries. In order to retaliate upon the merchants and traders for refusing to take the money, the farmers refused to bring their produce to market. A famine was so imminent in Providence because of this withholding of supplies that a town meeting was called to devise means for obtaining the necessaries of life.

To provide for immediate relief for persons in want of bread five hundred dollars was authorized to be borrowed by the town council. In Newport a mob brought on a riot by attempting to force grain dealers to sell corn for paper money.

In August, about two months after the establishment of the bank, affairs became so desperate that a State convention controlled by the country towns adopted a report recommending the General Assembly to enforce and amend the penal laws in favor of paper money and advising farmers to withhold their produce from the opponents of the bank. The General Assembly, convened in special session for the purpose, passed an additional forcing act, which suspended the usual forms of justice in regard to offenders against the bank, by requiring an immediate trial, within three days after the complaint was entered, without a jury and before a court of which three judges should constitute a quorum, whose decision should be final, and whose judgment should be instantly complied with on penalty of imprisonment. The fine for the first offense was fixed at from six to thirty pounds and for the second at from ten to fifty pounds. "This monstrous act of injustice," says Arnold, "was carried through the legislature by a large majority."

This second forcing act brought matters to a crisis. A butcher in Newport was brought into the Superior Court on a charge of refusing to receive paper money at par in payment for meat. A great concourse of spectators attended the trial, which was before a full bench of five judges. Leading lawyers appeared for both sides, and their arguments occupied a whole day. Two of the judges spoke against the forcing acts, and the other three were of the same mind. On the following morning the formal decision of the court was announced, declaring the acts unconstitutional and void, and dismissing the complaint. The wrath of the General Assembly at this decision was great. A special session was at once convened, and the judges were summoned, in language of incredible arrogance, to appear before the Assembly to assign the "reasons and grounds" for their decision. Three of the judges obeyed the summons, but as the other two were detained by sickness the hearing was postponed till the next session. At the next session four of the offending judges were removed. Before adjourning the General Assembly prepared a new act to "stimulate and give efficacy to the paper bills." This was called the Test Act, and it contained one of the most remarkable oaths ever prescribed to a free people. Every one taking the oath bound himself in the most solemn manner to do his utmost to support the paper bank and to take its money at par. All persons refusing to take the oath were disfranchised. Ship captains were forbidden to enter or to go out of the State, lawyers were not to be allowed to practice, men were not to be allowed to

vote, politicians were not to be allowed to run for office, and members of the legislature were not to be allowed to take their seats until the oath had been taken. This was so stringent a measure that the General Assembly was afraid to take the responsibility of enacting it, and after considering it referred it to the people of the towns for approval. Only three towns in the State voted in its favor, all the others rejecting it.

This ended all efforts to force the people to take the money at par in ordinary business transactions. The General Assembly, in January, 1787, formally repealed the forcing acts, and then took the first step toward the repudiation of the State debt by ordering the treasurer to pay off one-fourth of it in the bills received for taxes, that is, in the depreciated paper money, which, at that time, was circulating on the basis of six to one.

During 1787, when the value of the paper money ranged from one-sixth to one-tenth that of coin, bills in equity for the redemption of mortgaged estates were filed in large numbers in the courts. The Superior Court of Newport declined to try any case in which a large sum was involved. Suitors came to court with paper money in handkerchiefs, bags, and pillowcases, asking to have the holders of their mortgages forced to take this at par in redemption of their lands. One bag, containing fourteen thousand dollars, was brought for the redemption of a single farm. But the court refused to try all cases of the kind. The value of the paper money dropped steadily till fifteen dollars were worth only one coin dollar. In August, 1789, the General Assembly showed its first sign of returning reason by suspending the operation of the tender law. It followed this by repealing the statute of limitations, because of the depreciation in the value of paper money, and by extending the time allowed for the redemption of mortgages from five to twelve years. Finally, in October it repealed as much of the Paper Bank act as made the bills a tender at par, and debtors were authorized to substitute property at an appraised value for money in discharge of debts. The act which effected the repeal fixed the value of the paper bills at fifteen to one. This was the end.

But no such experience shook the popular faith in the feasibility of performing economic miracles by manufacturing money. The Confederacy, as we know, depended mainly for its means of financing the war upon the issue of irredeemable paper money, with results that are familiar. Yet a Southerner, writing of his recollections of that time, says:

Will the reader believe that with gold at a hundred and twenty-five for one, or 12,400 per cent premium; when every day made the hopelessness of the struggle more apparent; when our last man was in the field; when the resources of the country were visibly at an end, there were financial theorists who honestly believed that by a mere trick of legislation the currency could be brought back to par? I heard some of these people explain their plan during a two days' stay in Richmond. Gold, they said, is an inconvenient currency always, and nobody wants it, except as a basis. The government has some gold—several millions, in fact—and if Congress will only be bold enough to declare the treasury notes redeemable at par in coin, we shall have no further difficulty with our finances. So long as notes are redeemable in gold at the option of the holder, nobody wants them redeemed. Let the government say to the people, We will redeem the currency whenever you wish, and nobody except a few timid and unpatriotic people will care to change their convenient for an inconvenient money. The gold which the government holds will suffice to satisfy these timid ones, and there will be an end of high prices and depreciated currency. The government can then issue as much more currency as circumstances may make necessary, and strong in our confidence in ourselves we shall be the richest people on earth; we shall have created the untold wealth which our currency represents.

We should misread history if we did not take into account the entirely successful attempts to finance public need by inconvertible paper money. There have been such successes when the necessary conditions have been fulfilled. Indeed, it may be said of some of the belligerents in the Great War, as it might have been said of the Confederacy, and the Greenbacking of the North, that inflation presented the quickest and easiest means of taxation; that no other form of taxation could have operated at such junctures. The evil is not that such measures should be used as exceptional expedients for exceptional occasions, consciously adopted, but that public opinion should push or permit governments to use these means when less disastrous ones are available, under illusory notions about money and its management. The device can so easily drag a community into utter financial chaos and ruin that no piece of economic knowl-

edge is more important than an understanding of these inconvertible paper money ventures.

The story of a certain paper money attempt made by Rhode Island was told because the thing was on a small scale, within simple limits that can be followed. For the same reason the story of an experiment in inconvertible paper money also on a scale small enough to be clearly followed which succeeded, should be added and placed in juxtaposition.

The story of the Guernsey Market House has figured in many a currency debate, and has so often been taken as showing that it is open to a community to escape the burden of interest and the usual inconveniences of loans, that the history of what took place is worth noting. The records show that the Meat Market, of the Island of Guernsey, still standing, was built without any loan at all merely by the issue of pound notes, created for the purpose and which were gradually paid off as the rents came in. The Guernsey States in effect said:

> We propose to build a market house. We will issue one pound notes with which we will buy material and pay the workers. Those who use the house must pay rent or charges in these notes. As they come in they will be destroyed. Ultimately they will all be destroyed and the Island will have the house.

"And will have it for nothing," argue certain ardent currency theorists. But that, plainly, cannot be true. Somebody had to grow and supply the food which the workers consumed while the house was being built. What did those producers get in return? Did the population by these devices really escape the burden of interest or its equivalent? The story is taken from Mr. Theodore Harris' account which was compiled from the original documents.

The Island of Guernsey has its own Parliament, "The States" (*les Etats*). On the 12th of April, 1815, it appointed a committee to consider a scheme for enlarging the Market. The committee recommended the issue of State Notes, first to the amount of £3,000

"Thus," as the report to the Committee reads, "at the end of ten years, all the Notes would be cancelled and the States would be in possession of an income of £150 per annum, which would be a return to the £3,000 spent by them. Looked at from all sides, the scheme shows nothing but the greatest advantage for the public and for the States."

The next issue of Notes seems to have been to pay off the floating debt. On the 14th June, 1820, the States authorized the issue of 4,000 £1 Notes for this purpose. In recommending this course the Finance Committee makes some interesting reflections. "Respecting the floating debt, which consists of sums payable at times more or less distant, it would be easy to discharge it by £1 Notes put into circulation as need requires. The extinction of the whole of the floating debt could thus be brought about without the necessity of new loans. If loans should be raised it would be necessary to provide for payment both of the principal and of the interest. If, on the contrary, recourse is had to £1 Notes, the interest alone which would have been paid will suffice."

On 23rd June, 1821, the States authorized the issue of 580 £1 Notes to diminish the interest-bearing debt of the States. Further issues followed.

On 29th March, 1826, a further issue is authorized for the purpose of Elizabeth College and Parochial Schools, provided that the total number of Notes in circulation shall not exceed £20,000. In summoning the States on this occasion the Bailiff, Daniel de Lisle Brock, expresses the opinion that paper money is of great use to the States. There is no inconvenience because the Notes are issued with great care.

Extra precautions seem to have been taken on 28th June, 1826, when another issue, not exceeding £2,000 worth of £5 Notes was authorized.

Further care is shown by the fact that on March 26th, 1828, the States appointed the Finance Committee "to replace the used and worn-out Notes by new Notes, payable at the same time as the de-

stroyed notes would have been." Testimony is borne by this wear and tear to the extent to which the Notes circulated. Further issues were made.

Plans for the improvements in Rue de la Fontaine, a street adjoining the Markets, being adopted on 15th November, 1827, an issue of £1 Notes up to £11,000 was authorized to be cancelled by the proceeds of rents.

In 1828 and 1829 issues of Notes were authorized for various purposes, including £8,500 for the College and £11,000 in connection with the Rue de la Fontaine scheme.

At one of the sittings of the States in the year 1829, William Collings, a member of the Finance Committee, stated that there were 48,183 Notes in circulation, and other issues followed.

In writing a preface to the interesting book from which the above account is summarized Mr. Sidney Webb remarks that to many a humble student of money problems the Guernsey Market House seemed, in some mysterious way, to have been exempt from that servitude to previously accumulated capital in which the whole creation groaneth and travaileth. By the simple expedient of paying for the work in Government notes—issued to the purveyors of material, the master-workmen and the operatives, accepted as currency throughout the island, and eventually redeemed out of the annual market revenues—all tribute to the capitalist was avoided. In face of this successful experiment, the fact that we, in England, continued to raise loans and subject ourselves to "drag at each remove a lengthening chain" of interest on public debt, often seemed so perplexingly foolish as to be inexplicable, except as the outcome of some deep-laid plot of "the money power."

What really happened, however, Mr. Webb explains:

> What the Guernsey community did was that which nearly every community has done at one time or another, namely, issue paper money. The part of the story that we do not know is (a) what thereupon happened to the aggregate amount of "currency" of all kinds then in circulation within the island

in relation to the work which that currency had to do; (b) what happened to the prices of commodities.

It may well have been that the issue of paper money was promptly followed by some shipments of metallic money to England or France—perhaps even in payment for imported materials for the Market House—so that the aggregate amount of "currency" in the island was not in fact increased. Accordingly, no change of prices may have taken place. In such a case, Guernsey would merely have substituted paper for gold in its currency. The gold-capital heretofore in use as currency, and there, of course, yielding no capitalist any toll of interest, would, in effect, have been borrowed to expend upon the building of the Market House. And, as paper money probably served the purposes of the island every bit as well as gold, nobody was any the worse. By giving up the needless extravagance of using gold coins as counters, and by taking to paper counters instead, Guernsey really got its Market House without cost. The same resource is open to any community already possessing a gold currency, and becoming civilized and self-restrained and sensible enough to arrange to do without gold counters in its internal trade. But Guernsey could not have gone on equipping itself with endless municipal buildings as out of a bottomless purse. The resource is a limited one. This is a trick which can only be played once. When the gold has been withdrawn from the currency, and diverted to another use, there is no more left with which to repeat the apparent miracle.

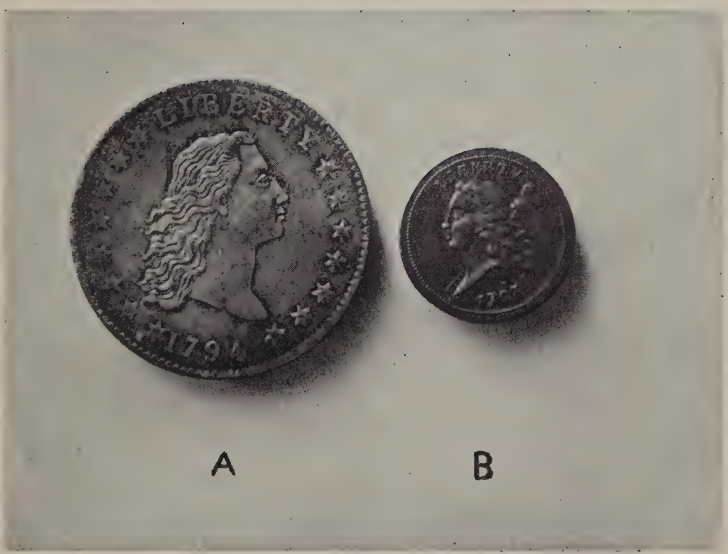
On the other hand, there may easily have been no special shipments of metallic money from the island, and the aggregate "currency" may have been increased, in relation to the work that it had to do, by the amount of the note issue. In that case, the economist would expect to see a gradual and silent rise of prices.

But Mr. Webb points out that there is a third hypothesis. There may have been, before the note issue, an actual dearth of currency, or a growing disproportion between the amount of the currency and the work that it had to do. Mr. Harris infers from his reading that such a stringency had been actually experienced in Guernsey, and that it was for this reason that successive attempts were made to prevent foreign coins from being gradually withdrawn from the island. Such a stringency, the economist would infer, would produce a progressive fall of prices, leading, by the silent operations of external trade, to a gradual readjustment of the amount of cur-

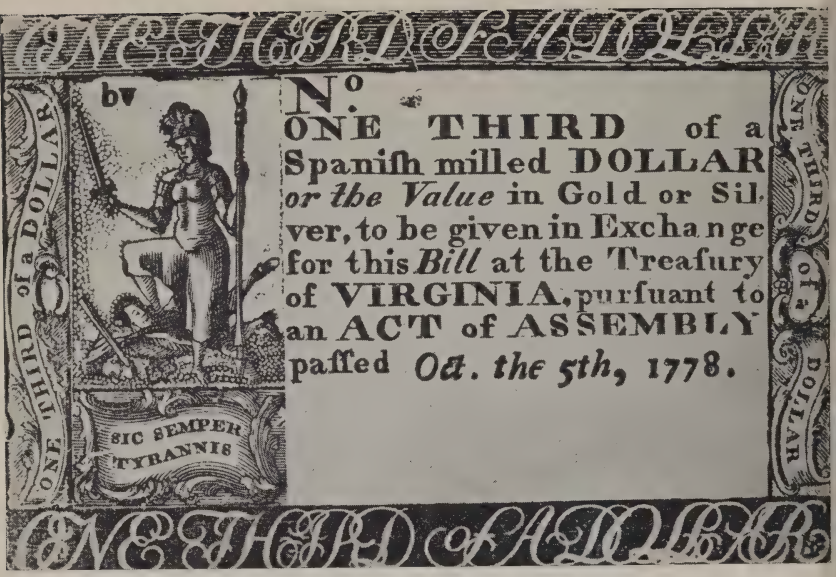
rency in circulation, by influx of gold from outside, until a new equilibrium had been reached. If the Guernsey Government's note issue happened to be made at such a moment, it may well have taken the place of the hypothetical inflow of gold, so far as the island currency was concerned. It may even have averted a fall in prices that would otherwise have taken place, the economic effect on the consumer's pockets being in that case much the same as if an actual rise had occurred. But the Guernsey Government, on this hypothesis, would, by substituting paper for gold, have gained for the community the equivalent of the cost of the addition to the gold currency which expanding population and trade were making necessary; and this gain was expended in building the Market House. Mr. Webb goes on:

> If prices generally did rise, in consequence of the issue of the paper money even by only one halfpenny in the shilling—if eggs, for instance, sold twenty four for a shilling, instead of twenty-five—this represented a burden laid or the Guernsey people as consumers, exactly analogous to a tax (say an octro duty) of four per cent on all their purchases. On this hypothesis, which I carefully abstain from presenting as anything but hypothetical, because we are unable to verify it by comparison with the facts, the economist would say that this burden or tax was what they imposed on themselves, and notably upon the poor, by increasing the currency instead of borrowing the capita from elsewhere. Instead of paying interest on a loan (to be levied, perhaps as an income tax on incomes over a certain minimum) they unwittingly chose to pay more for their bread and butter. The seriousness of this possibl result lies in the definitely ascertained fact that salaries and wages rise mor slowly, and usually to a smaller extent, than the price of commodities.

Mr. Webb's explanation, though entirely correct, might tend t obscure the facts which most concern us in this connection. It i not a question whether paper money devices will enable people t get things for nothing, but whether this method of credit expar sion, even sometimes at the cost of raising the price level, may nc be the best way of paying for them; and whether paper mone anchored to general wealth, an index figure, is not a more just, mor



(A) Silver dollar, one of the first issued by the United States, 1794.
(B) Bronze half-cent, part of the first coinage of the United States.


ONE THIRD of a DOLLAR
No
ONE THIRD of a Spaniſh milled DOLLAR or the Value in Gold or Silver, to be given in Exchange for this Bill at the Treaſury of VIRGINIA, purſuant to an ACT of ASSEMBLY paſſed Oct. the 5th, 1778.
SIC SEMPER TYRANNIS
ONE THIRD of a DOLLAR

Virginia note for one third of a Spanish milled dollar, 1778. *See Chap. XI.*

Mormon bank note, 1873, with signature of Joseph Smith, Jr., issued at Kirtland, where the first Mormon Temple was built. *See Chap. XI.*

manageable and more efficient money when wisely used, than one anchored to one commodity like gold. Guernsey's method had obvious advantages, and speaking broadly, achieved its objects and was successful.

Let the reader recall the very different history of the paper money experiment made in another small island—Rhode Island. What, in brief, explains the difference of experience? Why did Guernsey succeed where Rhode Island failed?

Briefly, because the Guernsey notes (to take those issued in connection with the Market House) were very limited in amount, issued with reference to revenue-bearing property shortly to become fruitful, "goods moving into consumption." Each note stood for consumable goods, which, if not actually in being, were coming into being; and the issues were limited to the value of those goods (the goods, in the particular issue under consideration being the Market House). The Rhode Island notes, on the other hand, were issued in amounts that had no reference to goods shortly to be produced. If any principle of limitation was applied at all it had no ascertainable relation to commodities save a vague potential value of land. Guernsey, by relating the notes to a tangible, visible, specific piece of property, did two things: gave confidence and applied discernible limitation. The Rhode Island notes did neither.

Some of these considerations have a bearing upon America's subsequent experience with money: a story which the next chapter tells.

CHAPTER XI

MONEY IN AMERICA FROM HAMILTON TO THE FEDERAL RESERVE

[BY LOUIS RASMINSKY, B.A., TORONTO]

From the earliest days of the Republic America has known the dangers of paper money instability and in the long struggle for sound money certain pronounced tendencies are revealed. Popular suspicion of centralized control or of legislation designed to check inflation has always been a strong popular sentiment. Hamilton had to meet it when he established the first United States Bank which worked well but only lasted a quarter of a century. The loss of its Charter was followed by a riot of paper money issued by state banks. Politics played a large part in all attempts at regulation, and the Civil War added complications. No sooner had specie payment been resumed than soft money advocates appeared in the form of Free Silver Men. Scientific control came finally with the establishment of the Federal Reserve System. The need for Society's control over the banking function, a century and a half after Hamilton's time, finally won over the popular tendencies towards "soft money."

CHAPTER XI

MONEY IN AMERICA FROM HAMILTON TO THE FEDERAL RESERVE

The fate which fell upon the currency of the Continental Congress (and of the States) has been outlined in a previous chapter. After that experience Congress not unnaturally turned to bank currency as a substitute for government currency. The fundamental distinction between these two was stated clearly by Hamilton in 1790. Speaking of the issue of paper money, he says:

> . . . the wisdom of the Government will be shown, in never trusting itself with the use of so seducing and dangerous an expedient. . . . The stamping of paper is an operation so much easier than the laying of taxes, that a government in the practice of paper emissions, would rarely fail, in any such emergency, to indulge itself too far in the employment of that resource, to avoid as much as possible one less auspicious to present popularity. . . . in the first case (viz., a paper currency issued by the mere authority of the government) there is no standard to which an appeal can be made, as to the quantity which will only satisfy, or which will surcharge to circulation; in the last (viz., one issued by a bank payable in coin) that standard results from the demand. If more should be issued than is necessary, it will return upon the bank.

That is, demands will be made upon the specie reserves of the bank, which in order to maintain its reserves will have to curtail its note circulation to the legitimate needs of industry and trade.

The valueless currency issued by the Continental Congress was, in fact, partly responsible for the beginnings of banking in the United States. In 1781 Robert Morris, who had been appointed superintendent of finance, submitted to Congress a scheme for the organization of a national bank. Its chief advantage to the government was to be the making of advances to the treasury in antici-

pation of revenues. Congress approved the scheme and incorporated the Bank of North America. The service rendered by the bank during the last years of the war was very substantial—it inspired public confidence and its notes circulated at par, thus providing a partial corrective to the currency disorders described in a previous chapter. After peace was established, the bank became a cinder in the public eye. Members of the debtor class who were not loath to see the currency depreciate in value, were loud in their condemnation of the bank.

Large sections of the community were in debt as a result of the long war, and the thing that each man wants when he is in debt is obviously more money. The fact that the more money each man has, the less each unit is worth—in other words, the higher prices will be—was evidently too subtle a point to learn in the course of a single century; for again the cry for "more money" went up throughout the Colonies. In Massachusetts there was a serious uprising led by Daniel Shay which demanded "more money," and throughout the whole American scene, the fundamental division was between the inflationists and the anti-inflationists. Though basically the country was economically sound, the national system of finances was weak and in 1786 it broke down completely. The result was a vivid realization that some adjustment must be made. The new constitution drafted by the Convention of 1787 was an attempt to bring the institutional machinery of the Federation into line with the financial and commercial needs of the country.

At this Convention a motion to strike out "and emit bills on the credit of the United States" from the list of privileges of the national government was carried; and yet there are repeated instances after 1812 of Congress authorizing the issue of bills of credit and legal tenders. As Professor Dewey says in his "Financial History of the United States," this

> affords a striking example of the ease with which the Constitution has been adjusted, if not strained, in order to meet real or fanciful emergencies

In December, 1790, a few months after he had taken office as the first Secretary of the Treasury, Alexander Hamilton, in reply to an order from Congress to inform that body what further provisions he considered necessary to establish the credit of the Republic, recommended the establishment of a national bank similar in constitution to the Bank of England. The Bank Charter Bill passed Congress with but little alteration from the form suggested by Hamilton, in spite of the very vehement opposition of most of the followers of Jefferson and Madison. The core of the opposition was a horror of centralization and control of any sort. The antagonists of the measure trembled at the thought of a banking monopoly and claimed that the proposal was unconstitutional. Hamilton, whose view was that the alternative to national control of the banking function was chaos and disaster, defended the constitutionality of his measure, basing his case on a broad, liberal interpretation of the organic law and not on strict constructionist principles. The opposition that Hamilton met to an extension of control over banking has been met at all stages of banking history by those who attempt to ensure that this important function should not be carried on in a manner detrimental to the interests of the public. Here, as later, the force of the facts was too strong for democratic misgiving or for prejudice, and public control was extended. The bank was authorized to issue notes to any amount, provided that all debts should not exceed the deposits by more than $10,000,000. The notes were made legal tender, and periodic statements of the bank's condition might be required by the Secretary of the Treasury. The Charter was to run for twenty years.

During the two decades of its life the bank fulfilled its duties well. Besides its service to the government, which the bank performed very efficiently, it exerted a powerful influence on behalf of a sound currency. The proportion of special reserve to the total amount of the notes outstanding was always kept high and it checked undue expansion on the part of the state banks by refusing to receive the notes of any which were not readily convertible. The number of

these institutions had increased from 3 in 1790 to 88 in 1811 and they now united in resentment and opposition against the sounder banking practice of the United States Bank. They, too, wanted to get some of the government business which was now going to the national bank, and they felt that their ordinary banking business would be increased with the large bank out of the way. Accordingly they organized a hue and cry against the renewal of the Bank's Charter in 1811: they were joined by the politicians of the Minority Party who were as much "agin the government" as "agin the bank."

Another reason for the unpopularity of the bank was the fact that 72% of its stock was in foreign hands. It was felt that even though foreign holders were disfranchised, they could in some mysterious way exert a "malignant influence." The constitutionality of the bank was once more questioned. There was surprisingly little economic analysis in the speeches and writings on the subject.

The combination of all these forces, however, succeeded in defeating the bank's request for a renewal of its Charter. In the House there was a majority of one; the vote in the Senate was 17 to 17, Vice-President George Clinton casting the deciding vote against the bill.

No sooner had war been declared in 1812 than Congress provided for the issue of $36,000,000 in Treasury notes.

"Out of tenderness for the people, or a tender regard for their own popularity," as Hildreth the historian, puts it, "Congress had resolved to carry on the war without the imposition of taxes."

The Treasury was bare, gold and silver were seldom seen, and the public credit was at the lowest ebb—the government at Washington was, in fact, lurching towards the bankrupt paper money policies of the revolutionary days. In spite of the expansion of banking facilities which had taken place since the liquidation of the first Bank of the United States, the new banks proved unequal to the task of financing the war. Much of their capital was fictitious (many of them had been organized on the unsubstantial basis of

the promises-to-pay of the subscribers to capital stock); they had already loaned money to the government up to the hilt; their capital was all invested; they had, stimulated by the war-time demand, put more notes into circulation than they could possibly hope to redeem in specie; between 1812 and 1817, their note issue had more than doubled. Large amounts of gold and silver were drawn off to foreign countries; Washington was captured by the British in 1814; the banks were forced to suspend specie payments. The suspension took place allegedly for patriotic reasons and was to continue only until the end of the war. But when peace came, the banks showed no inclination to return to "normalcy." The business of loaning to the government and to optimistic individuals had been very profitable and the occupation of banking had received a sudden and powerful stimulus. By a single Act of 1817, at about the time of the suspension of specie payments, the State of Pennsylvania had chartered thirty-seven new banks. The whole country was bank-crazy; "any place where there was a church, a tavern, or a blacksmith shop was deemed a suitable place for setting up a bank." Having tasted the intoxication of note issues with the sky only as the limit, and without fear of being called upon to own or produce anything more substantial than paper, the state banks resisted the return to sound money with all their might and main. The years 1815 and 1816 have been well called the "jubilee of swindlers and the Saturnalia of non-specie paying banks." Depreciation was inevitable; prices rose; people imagined they were becoming rich; the banks paid high dividends; business was brisk. The banks of the New England States alone maintained the convertibility of their notes into specie. Honesty for them was ultimately the best policy but for the time being it was a very expensive one. New England did not seem to share in the fictitious prosperity of the rest of the country. Elsewhere a depreciated currency and wide fluctuations of the exchanges opened the field for the money brokers; huge fortunes were derived from speculation in money. A. B. Hepburn has described the situation as follows:

Not since the Continental days had the country had such a wretched bad circulating medium as from 1812 to 1819. It was composed of a relatively small amount of notes of sound banks, an almost equally large amount of counterfeits, and a mass of paper, the value of which could rarely be known from one day to another. The location of many "banks" was practically unknown, and many of them had failed. Their notes were nevertheless in use; others deliberately repudiated their notes, still others pretended falsely to redeem upon demand. Other corporations and tradesmen issued "currency." Even barbers and bartenders competed with the banks in this respect. Altogether it appears marvelous that when nearly every citizen regarded it as his constitutional right to issue money, successful trade was possible at all.

Even before the war had ended Alexander J. Dallas, Secretary of the Treasury, had outlined a vigorous plan for the creation of a new national bank. The position of the government finance was precarious in the extreme. The depreciation of the currency had been so great that for over $80,000,000 worth of bonds floated between 1812 and 1816, the government had received only $34,000,000 in specie; its obligations had increased from $45,000,000 to $127,000,000. The Whigs, who were in control of the Government, were opposed to Federalism as a theory: they disliked government interference in banking, which they still liked to think of as a private enterprise. But the only alternative to establishing a national bank was to come to terms with the bankers of the North East; and the leaders decided to establish the bank, lest a greater evil befall them.

There was some disagreement as to the details of the scheme; much talk was heard of the "surrender to the money power"; but again the facts of the case, namely, the financial support required by the government, and the necessity of ensuring the security of the note circulation, proved too strong, and the second Bank of the United States was chartered in 1816.

Note circulation was limited to the total capital of the bank; the notes were to be receivable in all payments to the United States; and the bank was to act as the government's fiscal agent.

During the first year or so of its life, the bank was very badly managed. In spite of the scarcity of specie and the superabundance

f currency, the bank sought to extend its note circulation. It showed tself somewhat aggressively hostile to the state banks. High officers f the bank speculated in its stock. The branch bank at Baltimore ailed in 1819, causing serious loss and hardship to customers.

The first task confronting the bank was to substitute order for haos in the currency, and the way to do this was to persuade the tate banks to resume specie payments. But these institutions found he traffic in paper-money too profitable to be willing to give it up vithout a struggle; they repeatedly refused the demands of the Treasury that specie payment be restored. The bank finally succeeded in getting the state banks to agree to resume note-convertiility in February, 1817; after that date the government would emand specie. Most banks soon fell into line and the national bank hus had a substantial service to its credit during the first year of its xistence.

A new president, Langdon Cheves, took office in 1819. He introuced stringent banking practice, *i.e.,* the cutting down of loans nd note circulation at a time when industry was trying to recover rom the evils of the war inflation. The sudden curtailment of redits (between 1818 and 1820 circulation was reduced from $8⅓ illion to $3½ million, and loans from $41 million to $31 million), recipitated the crash which was probably inevitable. The liquidaion was very severe; the bottom fell completely out of prices, debts ontracted in "cheap" money had to be paid in "dear" money. Public ury against the banks was raised to fever-height; "they are the ultures that prey upon the vitals of the Constitution," was the charcterization of one editor. State legislatures sought reprisals against he National Bank: in Ohio it was declared an outlaw for refusing o pay unreasonable and differential taxation. Kentucky passed stay-laws" for the relief of distressed debtors; Georgia passed laws ustifying those who owed the bank money in refusing to pay it. The Southern and Western states, unable to resume specie payments, vere particularly resentful against the banks; they virtually tried o tax it out of existence. The bank, on the other hand, would

accept the notes only of specie paying banks; it strictly limited the amount of its note circulation in the South and the West. Further, it followed the policy of presenting for redemption in specie the notes by other banks as soon as it received them. This was sound banking practice, but the smaller banks found it irksome: they were forced to issue notes conservatively. There was, in fact, a shortage of sound money, and prices continued to decline.

The imperfect coördination of the volume of currency to the needs of the community was a result of the chaotic method of note issue and the lack of a centralized control. What each separate bank had to sell was notes and deposits: it sold as much of these as it could until the inevitable repercussion on its specie reserve was felt. When it saw its reserves approaching the "danger point," it contracted its loans, etc., sharply and liquidation resulted. The outcome was that business was kept in a constant state of oscillation between two extremes. The banks got all the blame and none of the credit, no matter what happened; on the up grade they were blamed for rising prices, on the down grade they were blamed for scarcity of money.

In spite of all this, the evidence appears to be conclusive that the National Bank was, particularly during the régime of Biddle, who succeeded Cheves as president, a powerful institution and of useful service to the government. It suppressed worthless bank issues, provided a reliable currency and protected American interests in international trade relations. All, however, did not bode well for the Bank. The state institutions were still smarting from the wounds of an enforced deflation; and a revival of Jeffersonian democracy turned the current of public opinion against the Bank which was popularly portrayed as a sinister monopoly. President Andrew Jackson was particularly annoyed with the Bank, possibly because of a discrimination alleged to have been exercised on the part of the Bank against one of his political friends, in the matter of a loan. Whatever the cause, Jackson announced in 1829, six years before the expiration of the Bank's Charter, his opposition to its renewal.

As a result of certain accusations brought against the Bank in 182

both Congress and the Senate authorized committees to pursue investigations into the working of the institution. The reports of both committees were highly favorable to the Bank, and it appeared that the Jackson scheme had been nipped in the bud. But the real fight had not yet begun.

Notwithstanding the opposition of his Cabinet (and throughout this whole affair, Jackson took advice, not from his real Cabinet, but from what his critics have not hesitated to describe as "a gang of unscrupulous and self-interested rogues" who, partly on account of their methods of backstairs intrigue, came to be known as the "Kitchen Cabinet"), the President repeated his attack on the Bank in his messages to Congress in 1830 and 1831. In 1832, a petition for the re-charter of the Bank had passed both houses: the sponsors of the measure led by Henry Clay were inspired quite as much by their dislike of Jackson as by their fondness for the Bank: a presidential election was approaching and they did not think that Jackson would dare to veto the measure. The President was, however, a very determined man and, taking the bull by the horns, he sent the measure back without his signature. This veto caused great excitement and was the chief issue in the campaign of 1832: Jackson was returned to office on a landslide.

He naturally considered his triumph and reëlection a vindication of his policy, and proceeded to molest the Bank. Its Charter which had four more years to run, could not be cancelled, so other means must be found. Jackson now proposed to remove the government deposits from the National Bank and to place them in selected State banks instead. Before he was able to do this, he had serious difficulties with his own Cabinet officials. McLane, the Secretary of the Treasury, refused to issue the order. He was therefore replaced by Duane. He, too, revolted, and was replaced by Taney, later to become Chief Justice, who signed the necessary instruction. The government money was now deposited with various state banks which were known to have proper political affiliations—these institutions became known as Jackson's "pet banks." Meanwhile the

National Bank, deprived of a very large proportion of its deposits was forced to cut down its loans and for this it was again attacked There is evidence that Biddle created a greater dearth of currenc and credit than was required by the circumstances; he did this in th hope of bringing pressure to bear upon the President to permit th re-charter of the Bank. The President, however, was adamant "Andrew Jackson," he told a delegation from Philadelphia, "woul never re-charter that monster of corruption; that sooner than live i a country where such a power prevailed, he would seek an asylur in the wilds of Arabia. . . ."

In 1836 the National Charter of the Second United States Ban came to an end. With the destruction of the Bank, there went th best means which could be devised at that time for furnishing th people of the United States with a sound currency. Unfortunatel it had allowed itself to become involved in the maelstrom of politi and those who could not use the Bank for their own ends dete mined to destroy it. No thoroughly effective substitute was provide for eighty years.

The transfer of the government funds from the National Bank t the State Banks naturally tended to stimulate the development of th latter type of institution, and again the country under the inspiratic of the new democracy, entered upon a career of "wild-cat" financ When the inevitable calamity came, the mob again attached th blame to the banks and not to their idol, Andrew Jackson, who ha destroyed the one institution which could have exercised some effe tive control over inflationary tendencies when they developed to th danger point.

Those tendencies would have been far more disastrous than in fa they were if the incredible economic expansion of the country—th opening of the West, the coming of the railroads, the tremendo increase in immigration, had not done miracles to keep pace wi the flood of "soft" money.

The period following 1820 was one of extraordinary econom development for the country as a whole. Peace was maintain

broad and the frontier of exploitation was being pushed constantly westwards. The cardinal point of the expansion was land settlement and speculation: these were encouraged by a lenient credit policy on the part of the government. Canals were a popular form of enterprise in the 20's; railroad construction began in 1830.

The stage was set therefore for a tremendous boom. The immediate stimulus to this boom was President Jackson's veto of the bill to re-charter the National Bank and the action he took in placing the government deposits in selected State institutions, the "pet banks." The prosperity of the country had increased, its revenues were larger, and the government holdings in these institutions exceeded the sum it had ever had on balance in the National Bank. The Treasury department advised its new depositories that:

> The deposits of public money will enable you to afford increased facilities to commerce and to extend your accommodations to individuals,

a clear invitation to inflation. The banks did not hesitate to accept this invitation and between 1829 and 1837, bank loans increased from $13,700,000 to $525,000,000; note circulation increased from $48,000,000 to $149,000,000; the number of banks increased from 329 to 788. Federal Government receipts from the sale of public lands increased during the same period from less than $2,000,000 annually to $25,000,000 in 1836. The Federal Government became free of indebtedness—a phenomenon unparalleled in the history of the modern world. It distributed its surplus among the several states, thus stimulating still further inflation. The credit of the country became very high on the world's markets and foreign lands preferred to invest the money which the United States owed them for its excess of imports over exports in the country instead of withdrawing it in specie.

Prosperity was widespread, but even the unparalleled economic development of that time could not keep pace with the inflation. The Federal Government found that in return for public lands, it was getting only the depreciated currency of irresponsible State

banks. President Jackson accordingly issued the famous "specie circular" in 1836, requiring that henceforth all payments for public lands be made in specie, and not in notes issued by banks. This precipitated the crash, and on May 10, 1837, the banks of New York suspended specie pavments, to be followed immediately by the other Northern banks.

The customary accompaniments of a financial purge were soon in evidence: A slump in stock prices, a rise in interest rates, a heightening of commodity prices, an increase in unemployment, a general slowing-up of trade. When specie payments were stopped, people began to hoard metal coins, and cities, firms and individuals issued notes of small amounts—"shin-plasters"—to provide a currency.

The government's disastrous financial experience with the State banks during the panic of 1837 revived the idea of establishing an independent Treasury as a substitute for a bank in the handling of the government funds. The new President, Van Buren, after providing for the emergency issue by treasury notes (between 1837 and 1843, $47,000,000 worth were issued, about one-third representing re-issues), turned his attention to this problem. He recommended that the government should break off all connections with banks, should collect its revenue in specie only and should keep the same in an independent Treasury until the time came for disbursement. In 1840 a bill to provide for the establishment of an independent Treasury was approved by the President. Clay, now the spokesman of the soft-money interests called the policy "a selfish solicitude for the government and an evidence of a cold and heartless insensibility to the sufferings of a bleeding people." The next year, the Whigs came into power and repealed the Act. Led by Webster and Clay they now insisted that the only solution for the present difficulties was a National Bank—it would provide a sound and uniform currency and would regulate the issues of the local banks. The subtreasury plan was, according to Webster "unworthy of a civilized nation." The bill for the establishment of a National Bank passed

Reichsbanknote
Zehn Millionen
Mark
DB-19
036872
zahlt die Reichsbankhauptkasse in Berlin gegen diese Banknote dem Einlieferer. Vom 1. Oktober 1923 ab kann diese Banknote aufgerufen und unter Umtausch gegen andere gesetzliche Zahlungsmittel eingezogen werden
Berlin, den 22. August 1923
Reichsbankdirektorium
Wer Banknoten nachmacht oder verfälscht, oder nachgemachte oder verfälschte sich verschafft und in Verkehr bringt, wird mit Zuchthaus nicht unter zwei Jahren bestraft
REICHSBANKDIREKTORIUM
REICHSBANKDIREKTORIUM

German ten million mark note, 1923. The fact that the date of the month is given on the note shows how the money varied in value from day to day.

Russian hundred thousand rouble note, 1921.

Congress but was vetoed by President Tyler on the ground that the Constitution gave Congress no right to charter a bank—

> The will of the people as expressed at the polls was ignored, the establishment of a Central Bank and thereby a uniform system of paper currency, national in character, was also defeated by this hair-splitting construction of the Constitution, extreme assertion of State sovereignty and jealous determination to minimize the powers of the federal government.

The Democrats came into power in 1846, and from that date until 1861, the government at Washington did its own banking, handling practically nothing but specie and keeping it in its own vault under lock and key. The dominant party (concerned chiefly for the safety of its own deposits) was still unwilling to admit that some control over the issue of notes was necessary, and continued to maintain, in the face of 1781 and 1837, that the public interest was best served by leaving to the banks themselves the regulation of note-issue.

In view of this, it is interesting to review briefly the history of state banking in order to determine to what extent their freedom from control proved practicable, and to what extent compatible with the public interest.

The first banks to be chartered by states were the Massachusetts Bank at Boston and the Bank of New York, both of which began operations in 1784. At first the control exercised by the legislature over the bank was both slight and negative, consisting chiefly of a series of prohibitions; such as restrictions on the amount of notes a bank might issue, the stocks it might trade in, etc. In 1804, the New York Assembly made it an offense for any one to engage in banking in that state as a common-law right; henceforth banking in New York was to be a special privilege granted by the legislature. Banks came into existence all over the country, but there was no outstanding increase in their numbers until after the closing down of the First Bank of the United States, under the circumstances related above. The years 1814-1818 witnessed a tremendous growth in the number of banks in the country. No town was too tiny, and no

hamlet too humble, to have a bank. Notes were issued galore, prices shot sky-high and speculation in bank stocks was common. With specie payments suspended, the last restraining factor had been done away with, and the banks vied with one another in the production of "wealth." They were naturally opposed to the resumption of specie payments, but the Bank of the United States finally persuaded them to agree to resume in 1817. The State banks were consequently hostile to that institution and were active in persuading the state legislatures to make its life unpleasant by means of taxation, etc. Few banks in the South and the West were able to resume specie payments until 1822. In 1825, New York led the way in bank reform by stating the positive duties and functions of a bank, as well as negative restrictions and prohibitions. The extension of control since that date has been gradual but steady. In 1827, the old method of stating (in its charter) what was expected of each bank was dropped and uniform regulations were imposed. In 1829, Governor Van Buren introduced the Safety Fund Act, which provided for a tax proportioned to capital to be paid by all chartered banks for the purpose of note redemption in case of failure. It was an important step forward from past forms of banking, in the extension of public control designed to furnish public protection.

The policy in New York State was not, however, characteristic of the country as a whole. Banking was, in the United States of the early nineteenth century, not a conservative investment as to-day, but rather a popular form of gambling. One could purchase bank stock to the value of $10,000 by a payment of $200 cash. A banking mania swept the country in the early decades of the nineteenth century. Notes were not then accepted at par, as now. The notes of a particular bank might be accepted at par in one part of the country while in another they were rejected completely. The banks regarded it as something of a grievance when their notes were presented for redemption in specie. In Vermont, a citizen of Boston had to appear before a grand jury for doing this. In order to evade redemption banks were often set up in unheard of, out-of-the-way places to

which there was little likelihood that their notes would find their way back once issued. This practice gave rise to the term "wild-cat" banks. The appellation was meant to indicate that the bank had been established in some primitive forest, uninhabitable by all save wild-cats. "Saddle-bag" banks was another term of reproach, signifying that the bank's notes were "carried about the country in saddle-bags, to be exchanged with landowners for their personal notes." "Red dog" currency was the attractive name given to certain issues of Michigan banks which were distinguished by the imprint of a dog in red color. An issue of bills printed in blue ink was affectionately designated "blue pups"; "Catamounts" and "stump-tails" were common in Illinois and Wisconsin.

Massachusetts was a leader in bringing order out of chaos in currency affairs. The Suffolk Bank became a clearing house for the notes of New England institutions and these were accepted at par. By 1825 practically all the New England banks had joined the system. That it did not do away with the evils completely, however, is rather humorously shown in the plan of the president and directors of the People's Bank of Roxbury, Massachusetts, who, charged in 1836 with corrupt practices which should result in forfeiture of charter, pleaded that they were

> "not themselves capitalists nor men of previous experience in banking, and acquired their first knowledge of its rules and principles in this comparatively humble institution."

In New York a "free banking" law was passed in 1838 by which one or more persons, by fulfilling certain clearly defined conditions might qualify to issue money. These conditions included the depositing with the state comptroller, government bonds or real estate mortgages to the amount of the notes issued and the establishment of a specie reserve of at least 12½ per cent. On the whole the system worked well. In 1846, the new constitution prohibited the legislature from permitting the suspension of specie payments, made

notes the first obligation of banks in the case of winding up and imposed double liability on shareholders. State control was gradually extending and New York was doing away with "fly-by-night" concerns and moving towards a safe and flexible banking system when the Civil War came.

In Indiana 51 free banks and private institutions failed between 1852 and 1857: note-holders and other creditors lost heavily. In Michigan, abuse was extended to a degree at which one can only marvel. After the suspension of specie payments in 1837, banks sprung up like mushrooms. The law required that 30 per cent of the capital be paid in specie. The state was determined to enforce this provision and sent inspectors around to the various banks to examine the vaults. But professional solidarity existing among bankers (those of Michigan probably), made the evasion of this law comparatively easy. The same bags of specie were transferred from one institution to another; when the commissioner came in by the front door, it often came in by the back; when he left, it would pass him on the way to the next bank. Here indeed gold and silver possessed more than mobility: they possessed locomobility. According to the commissioners themselves

> gold and silver flew about the country with the celerity of magic; its sound was heard in the depths of the forest, yet like the wind, one knew not whence it came or whither it was going.

In one bank, a box alleged to contain specie was opened and revealed lead and ten-penny nails. Seven more were opened: six contained nails and the seventh window glass broken into small pieces. By 1858 Michigan had enacted safeguards similar to those of New York. Between 1830 and 1840, the banking capital in Louisiana increased 700 per cent, and its trade had only increased 50 per cent. The inflation in this state was tremendous. All banks suspended specie payment in 1837 and were unable to resume until 1842. This state then enacted very stringent and enlightened legislation to safeguard the interests of depositors and note-holders: in particular a specie

reserve was required against all liabilities. This was the first instance of this provision on American statute books. Massachusetts followed and Ohio and other states managed to establish sound currency in this period.

As Professor Dewey points out, in passing judgment on the defects and shortcomings of banking at this time, we must take into account the fact that probably any system would have broken down under the "reckless spirit of speculative enterprise" which sought an outlet through the channels of credit. Inflation is a contingent danger of any pioneer country; and if that country be in addition a democracy unfamiliar with the intricacies of Gresham's Law, and the circumstances of whose development have associated sound money with political tyranny and loose banking with "the rights of the people," there indeed is the danger very greatly enhanced.

The fifties of the nineteenth century saw a further extension of state regulation of banking. The New York State Banking Department was established in New York in 1851, a clearing house was instituted in 1852, and in 1858 a fixed ratio of cash reserves to be held against deposit liabilities was agreed upon. Working on this theory that "publicity is the sovereign antiseptic and the best of all policemen," a weekly statement of the condition of each bank was required. This was probably more effective than any legislation in giving the banks a sense of moral duty to the public and in restraining unwarranted note-issues. Boston and Philadelphia likewise established clearing houses.

Not all the notes which circulated in the country were good, however. Banks and even merchants found it necessary to have constantly at hand a unique periodical known as a "bank-note detector." This bulletin, issued weekly, contained detailed descriptions of every type of note circulating in the country; its value, and the appearance of counterfeit which attempted to pass for it. During this period, dirty notes were preferred to clean; they had obviously passed through a good many hands. The most desired condition was a lot of pin-holes: this indicated that the note had been in the

hands of many banks. As Summer says in his "History of Banking,"

> A community forced to do its business in that way had no money. . . . We would expect that a free self-governing, and, at times, obstreperous, people, would have refused and rejected these notes with scorn, and would have made their circulation impossible, but the American people did not. They treated the system with toleration and respect.

In the period before 1858, the banks had become heavily interested in railway construction. This was the chief factor in the tremendous boom that took hold of the country in these years. But the banks had loaned so much of their money to the railway companies that their supply for other purposes was limited; particularly so in view of the fact that America paid for its large excess of imports very largely in specie. Rates of interest went very high. Trouble began in August with the failure of an important sugar brokerage firm in Boston, and by October all the New York banks except one had suspended specie payments. The chief sufferers were the banks of the Central and Western States which had invested largely in railway securities; the Southern States were hardly affected. The suspension in New York lasted only 60 days; by the beginning of 1858 the banks throughout the country were back on a specie basis. The liquidation had been very severe; unlike the crisis of 1837, it might have been avoided if there had been a strong central bank or if the State regulation of local banking institutions had been more effective. Illicit evasions of the banking laws in States dominated by soft-money sentiments went unpunished. The actual working of the currency system in the various States was often a perpetration of fraud and disaster upon the people, but under a strict construction of the Constitution, Congress had no power to intervene. It required the Civil War to abolish the evils of the state bank-currency system.

When the new administration of Lincoln took office at the beginning of the sixties of the last century, it found the nation's

finances in a very bad way. The Treasury was practically empty, customs receipts had fallen off considerably, the public credit was shaken. The additional burden now imposed by the war was one which it would have required heroic measures of taxation to finance and the administration did not feel itself able to impose such severe taxes on the people. Only as the war progressed was an adequate scheme of taxation developed; three out of every four dollars the government spent was borrowed money. Soon after the war broke out the government called the banks to their assistance, borrowing $150,000,000 from them. The government, contrary to the expectation of the banks, demanded that the strict letter of the law be observed and that this loan be paid by the banks in specie, instead of permitting the banks simply to place it to the government's credit on their books. Ultimately the strain on the specie reserves of these institutions became greater than they could stand, and on December 30th the banks went on to a paper basis, being unable to make further payments in specie. The government soon followed them, not having enough coin in its sub-treasury to pay off its creditors. The whole country was now on an inconvertible paper basis: it remained there for seventeen years.

We enter the period of "Greenbackery." Notwithstanding the resources derived from new taxes and issues of bonds, the government, sorely in need of funds, began in 1862 to issue bills unsupported by specie, but legal tender for all debts, except the payment of customs duties and interest on the public debt. Notes to the value of $150,000,000 were issued in 1862. Chase, Secretary of the Treasury, considered himself a hard-money man, but he accepted the issue of government notes as a necessary evil: he saw the dangers attendant upon it, but after all money must come from somewhere, and it was easier to print it than to borrow it. In point of fact, of course, this policy *was* borrowing with the distinction that the lender was not conscious of the fact that he was lending. The "forced loan" sent prices up; and though Chase disliked to do it, he had to ask Congress to sanction the issue of more "Greenbacks"—and still

more. By 1863 $450,000,000 had been issued, and in June, 1864, $431,000,000 was outstanding.

Such huge quantities of money could not be put on the nation's markets without affecting prices. Of the economic and social consequences, only one or two can be mentioned here. In the first place, there can be no doubt that the inflation of the currency added to the cost of the war. The government was forced to pay higher prices for commodities, and to a lesser extent for labor, while the returns from the bonds which it floated fell when measured in gold prices. Professor Wesley C. Mitchell estimates in his "History of the Greenbacks" that the additional cost from this source was $389,000,000. A further effect can be seen in the relationship between wages and prices. It is a universally accepted economic law that changes in wages tend to lag behind changes in prices, and nowhere was this more clearly illustrated than during the "Greenback" régime. According to the "Aldrich Report," prices rose from a base of 100 in 1860 to 217 in 1865 while wages rose from 100 to only 143 during the same period. This means that the real wages of labor dropped from 100 to 66 between 1860 and 1865—in other words the workman could purchase two-thirds as many commodities at the latter date as at the former. The relationship between debtor and creditor classes were of course completely upset; among the chief sufferers were the soldiers whose wages were left at $13 per month until May 1, 1864, and even then the increase to $16 did not nearly correspond to the increase in cost of living. Other classes in receipt of a fixed income or poorly organized, such as school teachers and other salaried people experienced severe hardship.

It was obvious from the moment the war started that the currency was badly in need of reform. Jacksonian democracy had destroyed the National Bank and there were now 7,000 kinds of paper notes in circulation, not to mention 5,000 counterfeit issues. It was the emergency of the war that gave the sound-money party a chance to put an end to the horrible confusion. Chase seems to have become converted to the National Bank scheme early in 1861: he recom-

mended it to Congress in his December report. It was, however, not until 1862 that the battle over the bill was really joined: two precious years had been wasted. The chief opposition to the measure came from the State Banks which, under the stimulus of the war-time boom had inflated their note-issues tremendously and did not wish to be held answerable to any national institution. In spite of their opposition, however, the Act was passed. Defects in the law were revealed and it was revised the next year. Government control over the banking function was now extended to a point which would have shocked the most hardened Federalist fifty years earlier: the volume of notes to be issued, their denominations, the amount of reserve to be kept against notes and deposits, the procedure in case of winding up, the interest rates to be charged, the type of property a bank might hold, conditions to be satisfied before the payment of dividends, the duties of directors—all these and many more things were regulated by the Act of 1864.

The first Act had attracted only 66 banks into the National system in six months; by the end of 1864, 638 had joined. The work, however, was not yet complete, for the State banks still inflated their note issues—Greenbacks were legal tender, and could be had easily and "cheaply" to pay any one who presented bank-notes for redemption. Congress therefore passed a law on March 3, 1865, imposing a tax of 10 per cent annually on the notes of all State banks—this wiped them out at one fell swoop, and the National Banks now had a monopoly of note issue. . . . The foundations of the American monetary system had been soundly laid.

Until the eve of the Civil War, the soft-money party had waged a battle which, on the whole, was yielding quite gratifying results. They had succeeded in destroying the national banking system and the State banks were issuing paper money with due consideration of the requirements of the debt-burdened Northern farmers. The reëstablishment of a national system during the war was a severe blow to the inflationary interests and when the internecine struggle

was at an end they were still determined that their monetary heresy should become the law of the land.

The agitation had two aspects: it involved in the first place a desire to pay off the national debt in "Greenbacks" rather than coin (and with a "Greenback" dollar worth 49½ cents in hard money in 1865, this virtually answered to a 50 per cent debt repudiation), and in the second place a resistance to any proposed contraction of the currency which had been severely inflated during the war.

The chief interest of the period from the point of view of monetary history, centers in the attempt to prevent the returning of the "Greenbacks" and the resumption of specie payments. In 1865 McCulloch, Secretary of the Treasury, urged upon Congress the necessity of making some immediate provision for retiring the fiat money; he regarded it simply as emergency currency and was not even certain of its constitutionality in time of peace. Congress endorsed this policy, pledging "coöperative action to this end as speedily as possible." An Act of April, 1866, gave the Secretary slight discretionary powers in the reduction of the volume of United States notes outstanding, but the measure was so unpopular that in two years less than 10 per cent of the notes were retired. Meanwhile, the agrarian representatives began to hear from "the folks back home." A very substantial sentiment was developing in favor of the "blood-sealed, battle-born" "Greenbacks." The failure of crops, the heightening of prices and business reverses brought thousands into the movement. McCulloch thought it wise to desist in his efforts to contract the currency; in February, 1868, both houses of Congress passed a law suspending any further reduction of the volume of "Greenbacks" outstanding. This was now $356,000,000 and that figure remained undisturbed for about five years; the legal tenders had evidently come to stay.

Some of the dangers inherent in a paper standard were illustrated in 1869 when Jay Gould and James Fisk, Jr., two speculators who were in close touch with those in control of the country's finance, undertook to "corner" gold, depending on the Treasury not selling

any of its supplies. In a few days the premium on gold went from 130 to 162. Then the Treasury sold and gold came crashing down to 135, causing ruin to thousands. The worst day in the history of Wall Street is Black Friday, September 23, 1869.

When the volume of legal tenders finally was changed in October, 1871, it was in an upward direction; and this in spite of the fact that the Senate had resolved the previous year that "the existing volume of such currency ought not to be increased." After the financial panic of 1873 there was an agricultural and industrial depression, which resulted in the customary "cheap money" agitation in the rural districts. The "Greenback" element was well represented in Congress by western members of the Republican and Democratic parties. The Secretary of the Treasury issued more legal-tenders and in April, 1874, Congress passed what is known as the "Inflation Bill," authorizing an issue of "Greenbacks" up to $400,000,000. President Grant courageously vetoed the measure, stating that such a move would be a departure from the true principles of finance. A second bill in June of the same year fixed the maximum at $382,000,000. In January, 1875, a bill was passed by the conscience-stricken Republican party providing for a national system of free banking, the retiring of "Greenbacks" to the extent of 80 per cent of the new National bank notes issued, and for the resumption of specie payments on January 1, 1879. If it had been seriously thought at the time that redemption was to take place, the chances are that the measure would not have passed both houses. John Sherman, who was appointed Secretary of the Treasury, in 1877, had to bring about redemption not with the assistance of, but in spite of, Congress. In that year a bill passed the Lower House repealing the Resumption Act, and it was only through disagreement in the Senate over a matter of detail that it was defeated there by a margin of one vote. But Sherman persisted in gold accumulation; in this he was aided by favorable commercial conditions, notably an enormous wheat crop sold at high prices in Europe where the year happened to be one of great scarcity. This brought quantities of specie in from abroad.

The country had "grown up" to the currency and by January 1, 1879, the "Greenback" was quoted at par. The country had got off an inconvertible paper money basis. The inflationist element seemed to have the last word, however; Congress passed a law on May 31, 1880 ordering that there should be no further destruction of "Greenbacks" and that any paid in should be re-issued by the Treasury. Legal-tender notes to the amount of $346,681,000 are still current.

The moral to be drawn from the years between 1860 and 1879 is the same as the moral to be drawn from the Jackson régime. The great agricultural regions of the United States, not having the benefit of well-developed banking institutions and suffering from a dearth of capital, confused the latter with currency and set up a cry for "more money." The persistent illusion that identified money and wealth, currency and capital, continued its work in nineteenth-century America. The arguments used were specious; the feeling intense. Certain signposts of danger had been passed but the journey's end had not been reached; the fight for sound money was yet to be won.

The advocates of more money refused to accept the verdict in the case of the "Greenbacks" as final, and groping around for an alternative they found an outlet for their economic emotions in an agitation for the free coinage of silver at the ratio of 16 to 1. During and after the Civil War, the country was on a paper basis, and there was practically no discussion of silver as a monetary medium. Silver had for some time been worth more as bullion than as money —that is, the amount of silver in a silver dollar, if melted down and sold for gold, would bring enough gold to purchase more than a dollar's worth of goods—so that there was a distinct loss in using silver dollars. Between 1792, when the mint was established, and 1870 only 8,000,000 silver dollars had been coined and not a single one of these was in circulation. The silver dollar was virtually an unknown quantity and when Congress passed the Coinage Act of 1873, it provided only for the resumption of gold payments and omitted all provision for the coinage of silver dollars.

Meanwhile, the price of silver began to fall in the world's markets. There was a tremendous increase in production in the far Western States, particularly Nevada; at the same time important European powers—Germany, the Latin Union, the Scandinavian countries, Holland—were adopting the single gold standard, so that their demand for the other metal fell off. The result was that by 1876 the silver dollar was worth only 90 cents. The inflationists, defeated in their attempt to get more "Greenbacks" were now joined by the owners of the silver mines, who were anxious to stimulate the demand for their product and thus raise its price; and these combined forces started a terrific agitation for cheap silver money which dominated American political life for the next quarter century.

They first turned their invective against what they called "the crime of '73" and convinced large masses of the people that the failure to provide for the coinage of silver in the Act of that year was to be attributed to the greed of Eastern capitalists whose only concern was that they should receive the interest on their bonds in gold, which had a high purchasing power. They claimed that the provision had been insidiously "sneaked into" the Act, though there is abundant evidence to show that at the time, Congress was fully aware that it was adopting the single gold standard.

The free-silver group showed its strength late in 1877 when a bill to provide for the free and unlimited coinage at the ratio 16 to 1 of silver passed the Lower House with a 5 to 1 majority. The commercial value of silver the previous year had been 1:18 in proportion to gold. The act was amended in the Senate, however, to provide for the purchase and coinage of not less than $2,000,000 and not more than $4,000,000 worth of silver each month. In this form the bill passed over the veto of President Hayes and became law in February, 1878. The vote in both Houses was geographical, only Eastern members opposing the measure. The Bland-Allison Act remained in operation until 1890 and during this time 378,000,000 silver dollars were coined; the purchase price of the silver to coin them was $308,000,000. It was difficult to get this money into cir-

culation: the banks did not want to hold an overvalued currency when they had access to one which was worth its face value; the people disliked the heavy silver dollars. The result was that this type of money began to pile up in the Treasury and to displace gold there; Secretary Sherman reported in 1880 that despite all his efforts, he had difficulty in maintaining in circulation more than 35 per cent of the amount coined; he urged that the coinage of silver should be considerably reduced. In 1884, McCulloch, Secretary of the Treasury, announced that unless the coinage of silver was stopped there was a danger that the Treasury would be forced to suspend gold payment and get on a silver basis. This announcement probably precipitated the panic of the same year; foreign investors were not enamored of the idea of being paid in a dollar worth 80 cents there was a sudden movement to sell and a sharp break on the New York security market. The depression made evident the fact that wasteful capital expenditure and mismanagement had not been uncommon in the country, particularly with regard to railway investment; many industries were affected by the crash and the extent of employment and frequency of labor disputes increased very markedly.

The depression was short-lived, but it lasted long enough to permit those affected by it to decide that it was the government's failure to enact a free-coinage law that was to blame for all their ills. During the period of business expansions which followed 1885 unusually large revenues managed to keep the country on the gold standard. The agitation continued to gain ground, however, largely due to the continued fall in the price of silver and the admission of four new Western States into the Union. By 1890 two more Northwestern States had entered and the free-silver propagandists were strong enough to bring their proposals before Congress again. The whole question was now inextricably bound up with tariff reform because the Republican free-silver Senators were willing to hold tariff legislation from the lower house until they got a satisfactory solution to their silver problem. After some bickering between the

two houses a compromise measure emerged in the form of the Sherman Act of 1890. This act provided for the compulsory purchase of 4,500,000 ounces of silver bullion per month at the market price so long as the bullion value of the silver dollar was less than that of the gold dollar. In payment for the silver, Treasury notes of full legal-tender character were to be issued. The measure "gave silver a boost" but it did not go the whole way in providing for unlimited coinage. Its obvious result was to inflate the currency; during the three years of its operation $156,000,000 in Treasury notes were issued. It became patent that the Treasury could not stand the increased drain on its gold supply and that something must be done. Between 1890 and 1894 the net gold reserve in the Treasury dropped from $190,000,000 to $65,000,000, or practically two-thirds. The inflation of the currency meant that money was easy in America and gold naturally tended to go to London, where interest rates were higher; in the first six months of 1891 over $70,000,000 in gold left. On the other hand the amount of paper legal tenders which were brought to the Treasury to be exchanged for gold jumped from 6,000,000 to $102,000,000 between 1891 and 1893. Extravagant appropriations by Congress prevented the accumulation of sufficient revenues to counterbalance this drain.

Business was naturally restive under such conditions and interest entered upon the forthcoming presidential election. A new party appeared in the field—the Populist Party—composed largely of the old "Greenback" element. They denounced the single gold standard as "a vast conspiracy against mankind." The Democratic Party carried the war into the enemies' territory by demanding that the 10 per cent tax on the note circulation of State banks be removed. They, too, yearned for the "good old days" of $500 lunches!

Cleveland, the Democratic candidate, was elected President with both houses Democratic as well. No attempt was made to restore the old State-bank circulation. Congress refused to relieve the President from the necessity of making silver purchases, and Cleveland precipitated trouble by insisting that the Treasury notes issued

against silver be redeemed in gold rather than silver. The ability of the government to maintain gold payments in the face of all these difficulties was seriously doubted, and the market was flooded with American securities which had been held abroad. The strain was too great and collapse was inevitable; the panic of 1893 was at hand. The usual results followed: industry and trade were utterly disorganized; there was not a branch of the national economy that was not affected. Unemployment was common throughout the length and the breadth of the country; one-quarter of the railway capital was in the hands of the receivers; banks suspended specie payments. Labor strikes and riots were not unusual in the spring of 1894. Coxey's army of unemployed marched on Washington. To make confusion worse confounded, the crop of 1894 was a failure.

Cleveland called for a special session of Congress and asked for the repeal of the Sherman Act, which required silver purchases to be made annually. This commodity, owing chiefly to the closing of the Indian mint to free coinage of silver had sunk even lower in value. Congress granted him his request and Cleveland now proceeded to negotiate with bankers for the sale of bonds for gold; but this only began a vicious circle, for other bankers immediately presented paper legal to the Treasury and demanded gold.

The Populist element accused the government of playing into the hands of Eastern capitalists; demanded that the public be given an opportunity to subscribe to the sale of government bonds; and encouraged by this concession took up the cudgels once more on behalf of the free and unlimited coinage of silver at the ratio 16:1. They blamed the low price of cotton and grain on the scarcity of money, saying that all that was necessary to restore prosperity was to increase the volume of currency in circulation. The Populist Party and the western section of the Democratic Party united to support Bryan and the stage was set for the election of 1896 with silver playing the leading note.

It was a battle worthy of its participants. Literature and propaganda, calumny and vituperation were dispensed in phenomenal

quantities. The eloquent rhetoric of William Jennings Bryan in the ause of silver won for him the name "the silver-tongued orator":

We are fighting in defense of our homes, our families and our posterity. . . we have begged and they have mocked when our calamity came . . . f protection has slain its thousands, the gold standard has slain its tens of housands . . . having behind us the producing masses of this nation and he world supported by the commercial interests, the laboring interests and he toilers everywhere, we will answer their demand for a gold standard y saying to them: You shall not press down upon the brow of labor this rown of thorns. You shall not crucify mankind upon a cross of gold.

He adhered to the tradition to which reference has already been nade, associating soft money with democratic freedom and sound noney with foreign (*i.e.,* British), tyranny. His campaign speeches n reply to the contention that bimetallism demanded international ction, included passages like this:

Shall we make our laws dependent upon England's action and thus allow er to legislate for us upon the most important of all questions? Shall we onfess our inability to enact monetary laws? Are we an English colony r an independent people? If the use of gold alone is to make us slaves, let is use both metals and be free.

One hundred and seventeen years ago the liberty bell gave notice to a vaiting and expectant people that independence had been declared. There nay be doubting, trembling ones among us now, but, sirs, I do not over-stimate it when I say that out of twelve millions of voters, more than ten nillions are waiting, anxiously waiting, for the signal which shall announce he financial independence of the United States.

This Congress cannot more surely win the approval of a grateful people han by declaring that this nation, the grandest which the world has ever een, has the right and the ability to legislate for its own people on every ubject, regardless of the wishes, the entreaties or the threats of foreign owers.

Nor was enthusiasm lacking on the other side. A New York editor said of the free-silver group:

Its nominal head was worthy of the cause. Nominal because the wretched addle-pated boy, posing in vapid vanity and mouthing resounding rottenness was not the real leader of that league of hell. He was only a puppet in the blood-imbued hands of Altgeld, the anarchist, and Debs, the revolutionist and other desperadoes of that stripe. . . . None of his masters was more ap than he at lies and forgeries and blasphemies and all the nameless iniquities of that campaign against the Ten Commandments.

A solid East and Middle West buried Bryan under a landslide o votes; the "sound-money" candidate was returned with a pluralit of half a million. It seemed that the lesson had been learned.

But if the advocates of a single gold standard felt that the electio of McKinley had settled the problem once for all, they had reckone without their host. There was still a strong element of free-silve sentiment in the Senate and the President himself was not disi clined to international bimetallism. The general drift of his ad ministration was, however, towards the establishment of a sing gold standard; this encouraged the Bryanites who felt that the la election had not been a clear-cut fight between gold and silver, an that if the people had to choose between them they would sele the latter; and they girded their loins for the next election. On th other hand, the country was enjoying a period of prosperity; larg volumes of gold were pouring in; the home-production of the met was increasing; the Spanish War had united the nation in patriot sentiment; and the friends of gold became aggressive. On Mar 14, 1900, they passed a measure which declared the gold dollar to the standard unit of value and instructed the Secretary to mainta all forms of money at a parity with it. All eyes were on the fort coming election. The country reëlected McKinley with a mu increased majority, thus putting its seal to the Gold Standard A of 1900. The last signpost had been passed, and it was now abu dantly evident that the lesson had been learned—the battle money as sound as gold and the then-existing banking organizati could make it, had been won.

The last chapter in the history of American monetary policy bef

he Great War must describe the origin and development of the 'ederal Reserve System.

Certain fundamental defects in the banking system of the United tates have already become obvious from what has been written. In he first place, the inelasticity of the currency was continually a ource of trouble. A period of inflation was succeeded by a period f monetary stringency and no adjustment of the volume of currency n circulation to the needs of industry was scientifically possible. So ng as ordinary assets were not permitted to form the basis of note irculation, and government bonds were required instead, no such djustment was to be hoped for. When money was tight the Jational banks were obviously unable themselves to buy bonds in he open market to permit an expansion of the currency. A second efect was that a large proportion of the reserves was divided among 000 different banks, unable to be gathered together quickly in me of emergency. On the other hand, the remainder of the serves tended to concentrate in New York where they were put out call. In time of crisis, they practically "froze," and were unavail- le for the easing of money in other parts of the country. A further efect in the system was the inelasticity of deposits. The minimum serves which the banks were forced to keep, very rigidly fixed the nount of credit they could extend.

By 1906 a campaign for the reform of the banking system was nder way, but it evidently required the panic of 1907 to shake the egislature into action. A violent speculation had got under way e previous year, involving a severe strain on bank credit; call loans lvanced as high as 60 per cent in one instance and above 25 per cent n seven days. State banks and trust companies had increased in umbers and many of them made little attempt to maintain an lequate reserve. The Knickerbocker Trust Company failed in Oc- ber, 1907, and this precipitated a wholesale liquidation—the "rich an's panic." In January, 1908, 2,000 firms in New York became solvent.

The panic of 1907 forcibly directed public attention to the fact

that the nation's industry and commerce had grown faster than its banking facilities. A measure affording some relief—the Aldrich-Vreeland Act—was passed in 1908, but the important event in that year was the appointment of a Monetary Commission to consider the whole problem of currency legislation. The Republicans were not anxious to alter the existing order of things and the Democrats, swept into power in 1913, took advantage of their opportunity to enact currency and banking reforms which combined the principles of greater social control with a sufficient amount of decentralization to prevent any single financial group from getting too much power. As Professor Beard suggests in "The Rise of American Civilization" the Federal Reserve Act of 1913 represents the union of "Jacksonian hopes" with "financial propriety."

Of the provisions of this measure we can give only the bares outline here. The unity of the banking system is obtained by th creation of a Federal Reserve Board, consisting of seven member and including the Secretary of the Treasury and the Comptroller o the Currency, ex-officio, and five others nominated by the President The country is divided into twelve Federal Reserve Districts wit twelve Federal Reserve cities as their banking centers. These citie are Boston, New York, Philadelphia, Cleveland, Richmond, Atlant Chicago, St. Louis, Minneapolis, Kansas City, Dallas and San Fra cisco. These banks are banker's banks: they receive deposits, mak rediscounts and hold reserves for member banks. All Nation banks are compelled to become members and State banks are urge to join the system. One of the functions of the banks enumerated the Federal Reserve Act is to "furnish an elastic currency." This supplied through the issue of Federal Reserve notes which are ma obligations of the United States Government. These notes are issu by the district banks to the member banks upon receipt of comm cial paper of a defined character. It was expected in this way t volume of currency would be brought into direct relation with t needs of the business community. The Federal Reserve notes protected by 40 per cent gold reserve. This provision may

suspended if necessary, but in that case a graduated tax on notes outstanding makes over-issue unprofitable. The concentration of reserves permits of a reduction in the amount required compatible with safety; more money is thus released for active pursuits.

This, in most scanty outline, is the measure which transformed a banking system which Andrew Carnegie in 1908 called "the worst in the civilized world" to one which ten years later had stood the test of war finance and was universally regarded as one of the best in existence.

The history of monetary policy in the United States is complicated, but the many events outlined above are not simply isolated incidents, but rather beads on a string; it is our purpose now briefly to examine the string itself and to discover wherein the unity of American monetary history consists.

The string is double: there are two distinct tendencies at work throughout the period covered. The first has already emerged clear-cut from the discussion itself—namely, the strength of inflationary tendencies in the United States, inherited from colonial times, until the establishment of the Federal Reserve Board. Not only in time of war, as for example during the Revolutionary and Civil Wars, was resort had to paper or other "cheap" money, but also in time of peace and normal economic expansion. The inadequacy of government revenues, the inability or unwillingness to impose severe taxation and the weakness of the public credit combined to make a thoroughgoing inflation of the currency in order to finance a war appear inevitable. In time of peace, the inflationary urge came from the "frontier." Where capital was required and people had gone into debt in order to obtain it, it was not unnatural that the old confusion which identified money with capital should thrive.

Congressmen, on the whole, were in close touch with the people they represented; they were led by them and did not lead them; they shared with them the same hopes, fears and fallacies. Often they were "more money" men unable to separate the core of truth in

some of their contentions from the surrounding mass of fallaci which obscured it. They could see that a currency rigidly anchore to gold, dependent upon so fortuitous a thing as the discovery of th metal, was controlled by an "irrelevancy" and might well prov inadequate to commercial need. But the remedies to which the turned would have proved, all experience shows, as bad as, or wor than, the disease. In supporting the plans they did they were hee less of the lessons of previous generations, and of economic la The evils attendant upon a crude "more money" policy—the di organization of industry; the changes in the relationship betwe economic classes; the lag of wages behind prices; the hardshi therefore endured by workers and particularly by the receivers fixed incomes—these have already been sufficiently described. Th last fight for "soft money"—the free silver agitation—was th supreme dying effort of the inflationary party, aided and abetted b the owners of silver mines. With the second defeat of Bryan, th country declared unequivocally against the policy of indiscrimina inflation in favor of hard money.

The second tendency to be found in American monetary history the gradual but steady extension of social control over the bankir function. The lesson that history seems to enforce in this connecti is that in the case of money and banking, economy and efficien depend upon an intelligent central control. That this control mu be ultimately by society as a whole, rather than by bankers merel is revealed by every extension of banking legislation which follo upon any defect due to unregulated banking enterprise. We ha seen that the banking function is too closely interwoven with t life of the community to permit of its unregulated exploitation f profit only, without regard for the effect of banking policy upon t community as a whole. The opposition to National control car first, from those who were jealous of the rights of the individu States and therefore wished to keep the Federal power at a minimu and second, from those who resented and objected to any gover ment interference with "legitimate business enterprise." Alexan

Hamilton had to contend against both those forces; his plans for a centralized banking institution were met with suspicion and distrust; charges of dishonesty were brought against him which he was able to refute only by those disclosures of certain personal relations with which the readers of his biography are familiar. But from Hamilton's day to the present, the line of progress has been in the same direction. Opposition to society's control at no time ceases, but its need has become so manifest that banking has now ceased to be a purely private enterprise.

L. R.

At a time when the indebtedness of one nation to another and the difficulties of collecting such debts occupy so large a place in the financial concerns of this country, it is useful to recall certain incidents of American financial history now commonly forgotten, but which have a very direct bearing on this question of foreign debts and the causes which sometimes lead to their repudiation.

A considerable number of the individual states of the Union have at various times in the past borrowed money abroad, and then repudiated the debt. In the case of some seven states the debts have never been paid, no arrangement has been made, and they remain a moral liability to this day.

It was between the years 1830 and 1850, mainly, that these foreign debts were incurred—usually by the sale of State Bonds in London. Those years were periods of very great monetary disorder in the United States as the foregoing sketch shows. Many Americans incurred great losses as the result of banking and financial methods then common in the United States, and Americans may have argued, indeed did, that the American governments concerned did not treat foreigners any worse than they treated Americans. And this is a fact which foreigners, especially English families who still hold in considerable amounts some of these repudiated State Bonds, would do well to keep in mind.

Nevertheless the fact remains that American states urging no ground of fraud or malpractice of any kind, have simply and purely refused to repay money which they borrowed, not altogether unmindful of the fact perhaps that, owing to a peculiarity of the American Constitution, no foreign government has recourse against an individual state of the Union.

Some of the states which originally defaulted have since made good. These were certain Northern States which borrowed and then repudiated. New York capitalists made common cause with the foreign investor and boycotted the offending states when they came for further loans. The Northern States therefore made arrangements with their foreign creditors and came to a settlement. But in the case of the Southern States who had similarly borrowed abroad—Virginia, North Carolina, South Carolina, Louisiana, Mississippi, Tennessee and Florida—the pressure of New York does not seem to have been as effective, and after the fifties attention became so much centered on the struggle with the North that the question of these debts got thrust into the background, while, of course, the Civil War and subsequent settlement still further postponed attention.

It should be made clear, however, that these particular debts have nothing whatever to do with the Civil War or the "Carpetbag" Governments which followed. They were incurred a quarter of a century or more before the Civil War began.

The Corporation of Foreign Bondholders in London has recently issued a report on this subject and taking the Bonds of the State of Mississippi as typical of similar repudiations made by the other six states, points out that:

(1) The loans were not raised for corrupt or improper purposes. They were raised to meet a great public need for banking facilities to enable the commercial and industrial development of the State to proceed. (2) The legality of the issues was not disputed from 1833 to 1841, although, during that period, there were four separate changes of Governor by election of the people, and the State Con

stitution remained the same until 1861. The validity of the issues was also upheld by the highest State courts.

Between the years 1831 and 1838 Mississippi contracted two loans, the proceeds of which were applied to the establishment of two banks, known as the "Planters' Bank" and the "Union Bank." The capital amount of the former issue was $2,000,000 and that of the latter $5,000,000. The interest in arrears to the present date is approximately $32,000,000.

The bonds were sold at a high price, and Mississippi received the proceeds in full. A very large proportion of the total issued is still held in Great Britain. That it was intended to be so held is indicated by the fact that the coupons in both cases were made payable in London. In 1841 Mississippi defaulted, and subsequently passed a law forbidding the recognition of the debts. The loans have remained in total default for eighty-seven years, and all attempts to obtain recognition of them from the State have proved fruitless.

In the course of a report on the Union Bank by a joint committee of both houses of the Mississippi Legislature in 1839, Mr. Henry S. Foote, subsequently Senator of the United States and Governor of Mississippi in 1851, expressed the following views, which read strangely in the light of subsequent history. After referring to "the general high sense of honor pervading our whole population and the lofty indisposition almost universally prevailing among us to invoke the aid of law in resistance of a claim of unquestionable justice," he continues thus:

> All Europe knows, or at least every man engaged in buying and selling Stocks is bound to know, that these Bonds of the State of Mississippi constitute well-nigh the best stock in the world. Mr. Biddle knew it, or he would not have purchased the Bonds; it was well known in London, else Mr. Biddle would not have been able to sell them in advance. . . . The rest of the Bonds, through going to Europe under the voucher of Nicholas Biddle, now at least secured, might be expected to sell at once; yes, they would be eagerly grasped at either in London or Amsterdam.

Mr. Biddle was an agent of the United States Bank, at the London Agency of which the bonds and coupons were made payable.

At this state in the proceedings, Governor McNutt also delivered himself as follows in the Senate:

The faith of the State is pledged for the redemption of two millions of dollars of Bonds sold to take stock in the Planter's Bank and for the whole capital of the Union Bank. A just regard for the honor of the State demands that these institutions should be managed with great prudence in order that ample provision be made for the punctual payment of interest, and of the Bonds at maturity.

An attack upon the validity of these bonds was made later. The resolutions in reply, which passed both houses of the legislature, disposed of all questions of the legality or validity of both the bond issues concerned. The resolutions were as follows:

First.—That the State of Mississippi is bound to the holder of the Bonds of the State of Mississippi sold on account of Planters' and Mississippi Union Bank for the amount of principal and interest due thereon.

Second.—That the State of Mississippi will pay her Bonds and preserve her faith inviolate.

Third.—That the insinuation that the State of Mississippi would repudiate her Bonds and violate her plighted faith, is a calumny upon the justice, honor and dignity of the State.

The bonds remain unpaid.

CHAPTER XII

THE FEDERAL RESERVE SYSTEM AND ITS CRITICS

The defects which the System was intended to correct. Has the intention been fulfilled? The grounds of criticism. The problems of stock exchange speculation. The relation of the Federal Reserve System to international finance. The meaning of what happens when gold comes in or goes out of a country. Why the Federal Reserve Board is compelled to consider the foreign situation. Groping towards an international System. The International Bank of the Young Plan.

CHAPTER XII

THE FEDERAL RESERVE SYSTEM AND ITS CRITICS

No sketch of the monetary history of the United States would be complete without a reference to the controversies which are continually arising as to the working of the Federal Reserve System. Is it fulfilling its intended function? Has it really the effect of putting on the brake when things move too fast, and accelerating when things move too slowly? Is it more concerned, as some have alleged, with world finance than American business? Do its methods discriminate against the farmer, or in favor of stock speculation as against the business needs of the nation? The defects in our banking and currency system, which it was the object of the Federal Reserve System to remedy, have been summarized by Mr. Laurence Laughlin as follows: an inelastic bank-note circulation; an even more dangerously inelastic credit system; ineffective use of a large supply of gold; a scattering of reserves and lack of coöperative action by banks in times of stress; a rigid reserve system which induced panics; state banks and trust companies doing a commercial business but in different systems; an independent Treasury divorced from the money market, which imperiled bank reserves in times of difficulty; the drift of idle funds to the call-loan market where they fed stock speculation, and the want of American banking facilities in other countries to aid our foreign trade.

It was commonly claimed at the time of the establishment of the system that the whole primary purpose was to make money easier, to cheapen it to the farmer and producer and manufacturer and merchant. Senators and representatives both proclaimed within and without Washington that what they were seeking was a financial system that would give us an average discount rate approaching

that of the Bank of France, where interest over a series of years average between three and four per cent. They frankly said they hoped for something under the four per cent rate. The charge was that the centralization of the reserves in New York or Wall Street "made money for bankers in that 'den of iniquity,' taxed the country with irregular and high rates of interest, and repressed commerce, investment and prosperity."

Early criticism of the system when finally established concentrated largely on these points:

(1) The establishment of the maximum number of 12 districts, nothwithstanding that the advice of a large number of bankers and business men had been in favor of the limitation of the number to the minimum required by law.

(2) The failure to create a single large overshadowing bank with a capital of not less than $25,000,000 to $30,000,000, such a bank having been strongly recommended on the ground that an institution of such a size was necessary to control foreign exchange operations and to direct the course of trade and monetary operations between the United States and foreign countries.

(3) The placing of too many districts on the Atlantic Coast while the West was left relatively unsupplied with districts and banks.

(4) The faulty division of the country between the several districts in certain particulars, among others, these: (a) the selection of boundary lines that would include larger and richer centers as tributary to smaller and weaker points at which reserve banks were situated, (b) the artificial separation of certain portions naturally tributary to a given city, and their inclusion in a region assigned to another city, (c) the erroneous assignment of certain regions to cities with which they have comparatively poor or slow transportation connections.[1]

On these points one writer[2] has pointed out that "those who stress the effect of the districting overlook the fact that the new system is simply superadded to existing redistribution of resources and does not affect them, since the gross amount of required reserve is so reduced under the system that banks which had been in the habit of keeping reserve balances with the old reserve cities could

continue to do so without serious hardship under the new law, even if these balances were not counted as reserves."

The first annual report of the Federal Reserve Board dealt very clearly with the problem of what the Functions of Reserve Banks are. What, it asks, is the proper place and function of the Federal Reserve Banks in our banking and credit system?

On the one hand it is represented that they are merely emergency banks to be resorted to for assistance only in time of abnormal stress, while on the other it is claimed that they are in essence simply additional banks which should compete with the member banks, especially with those of the greatest power. The function of a reserve bank is not to be identified with either of these extremes, although occasions may arise when either of such courses may be imperative. Its duty plainly is not to wait emergencies, but, by anticipation, to do what it can to prevent them. So also if, at any time, commerce or industry, or agriculture is, in the opinion of the Federal Reserve Board, burdened unduly with excessive interest charges, it will be the clear and imperative duty of the Reserve Board, acting through the discount-rate and open-market powers, to secure a wider diffusion of credit facilities at reasonable rates. The Federal Reserve Banks are the holders of a large part of the banking reserves of the nation, the foundation of its banking structure. Nothing should be permitted in the operation of the Reserve Banks which would weaken this foundation. The resources of a Reserve Bank, to be useful for its peculiar purposes, should always be readily available. It follows, therefore, that they should be mainly invested in such short-term liquid investments as can be easily converted into cash as occasion may require. This conception of a Reserve Bank, moreover, implies that its investments should be marshaled in a steady succession of maturities, so that it may at all times as nearly as possible prove equal to the situation.

The ready availability of its resources is of supreme importance in the conduct of a Reserve Bank. Only then can it become a safe and at the same time flexible instrument of guidance and control, a regulator of interest rates and conditions. Only then will it constantly carry the promise of being able to protect business against the harmful stimulus and consequences of ill-advised expansions of credit on the one hand or against the menace of unnatural contractions on the other, with exorbitant rates of interest and artificial stringencies. It should at all time be a steadying influence, leading when and where leadership is requisite, but never allowing itself to become an instrument for the promotion of the selfish interest of any private or sectional group, be

their aims and methods open or disguised. It should never be lost to sight that the Reserve Banks are invested with much of the quality of a public trust. They were created because of the existence of certain common needs and interest, and they should be administered for the common welfare—for the good of all. The more complete adaption of the credit mechanism and facilities of the country to the needs of industry, commerce, and agriculture—with all their seasonal fluctuations and contingencies—should be the constant aim of a Reserve Bank's management. To provide and maintain a fluid condition of credit, such as will make of the Reserve Banks at all times and under all conditions institutions of accommodation in the larger and public sense of the term, is the first responsibility of a Reserve Bank.[3]

As in this discussion a common criticism leveled at the Federal Reserve Board is that it is consulting the convenience of London or Europe more actively than the needs of American Business, we may begin by asking Why need American bankers concern themselves with "abroad" at all?

The obvious reply, of course, is that our own stability is bound up with the foreigner; we want him to pay for the goods we send him, and pay interest on the money that we loan him. American prosperity has always been in large degree dependent upon the foreigner. When agriculture was more dominant than it is, the prosperity of the farmer was dependent to an enormous degree upon the sale of cotton, wheat, foodstuffs to Europe. The price of all the main agricultural products—and so the economic health of the country as a whole—was determined by world conditions. And as the relative importance of the foreign market to the farmer declined the importance of the foreign market for manufacturers, and as a field for investment increased. We do our best—rightly—to expand this foreign trade. Yet every time we expand it, we become more dependent upon the stability of the foreign financial world. We want a condition in which our bills will be met, the moneys owing to us paid; and if those conditions are not fulfilled our own domestic economy is upset.

It might seem childish to point this out. And yet that it is nec-

sary to do so, is proven by the fact that again and again we find the Federal Reserve Board criticized for "bothering itself about Europe." Yet if we want to do a foreign trade at all—and we do—we *must* bother about the financial condition of Europe. If the money system of Europe gets into grave disorder, our own system, based on the assumption that the daily payments coming to us from abroad will be made, will also get upset.

Now at present there is no international money, no international "unit of account," except gold. When the value of a pound or a franc is just what it will buy on a given day in the country where it circulates, where that is, it is not readily convertible into gold, dealings obviously must become extremely difficult. The kind of thing that happens when money is paper, issued at the will and pleasure of governments, has been described at various stages of this story. If the American business man is to "know where he is," if business is to be done with confidence and stability, the money that he takes and the money that he gives must be something universally acceptable. The money which is of universal acceptability at present is gold money, or money convertible readily and without loss into gold. Francs are no use to an American—he must send them back to France and there use them (if they cannot be converted into gold) for the purchase of French goods; dollars are no use to the Frenchman. The American must turn his francs into dollars and the Frenchman his dollars into francs. How many will he get? If he is to do business with any security he must know. One authority explains:

> A merchant who is selling goods all over the world is seriously hampered if he cannot make a fairly close calculation concerning the number of pounds which will be fetched by the foreign moneys for which he is selling his wares. He has difficulty enough in these days of acute competition in finding buyers at prices that will show him a profit; and if the profit

shown is going to be turned into a loss by fluctuations in exchange his business becomes a blind gamble.

This is what happened with regard to trade with many countries in the after-war years before the gold standard had been restored. Fluctuations in exchange were so wild and enormous that they were more important than producing and providing good commodities. Banks and exchange dealers did what they could to relieve the merchant by making forward contracts for him in the money for which he was going to be paid, so taking the exchange risk off his shoulders, but it had to be paid by somebody.[4]

Here is where gold comes in. Because all the chief commercial nations use it and keep gold for the settlement of balances, there is, in effect, an international money of which the particular moneys of the nations are specimens with slight local variations. "America calls her money dollars; we call ours pounds, but the fact that both dollars and pounds are claims to gold means that both countries use one money, and that dollars and pounds cannot vary beyond quite narrow limits in relative value. . . . It is difficult to see how, if the gold standard were abolished, any efficient substitute for the gold link could be brought into practical use." [5]

Most international payments are made by the cancelling out of bills of exchange: Americans having made purchases in England owe London merchants a thousand pounds; but Englishmen having made purchases in America owe New York merchants a similar amount. Americans do not send gold to London and then have Englishmen send it back. Only when the balance of claims between two places do not roughly agree is gold shipped to settle the difference, and then only if it cannot be met by what is called arbitrage which consists of dealings in bills on other centers. For instance London may not have enough claims on Paris to set off the claims of Paris on it, but may be able to fill the gap with bills on Berlin which Paris may happen to want. The system on which the ex-

changes work is thus somewhat similar to the bankers' clearing house.

But the ultimate appeal is to gold, and each center must have sufficient to meet the demands likely to be made upon it. What that metallic reserve should be is a matter of great dispute. Plainly it depends in some measure upon incalculable things: a sudden commercial failure, panic, political disturbances, what not. When the reserve falls below a certain level then the Central Bank concerned resorts usually to the device of raising the discount rate (or bank rate as London calls it) so that two results are hoped for: that the extension of credit will be checked (because loans cost more) and that money from abroad will be attracted by the prospect of higher rates. By diminishing the demand for loans (by reason of the higher rates) the strain on the gold reserve is eased (by giving it less to do); while the "pumping in" of money (itself gold or a claim to gold) through the raised bank rate, adds to the size of the reserve. Imports of gold expand credit facilities: per contra, exports of gold lead to restriction of credit facilities.

Yet, obviously, one center cannot afford to see another embarrassed to the point where demands held by the first cannot be met by the second.

This is not always avowed. Writing a year or two ago one authority[6] comments:

> The Federal board has let it be assumed that easier money for crop movements was its chief aim in reducing the discount rate. But another purpose was undoubtedly more important. The former rates in the United States were a factor in the movement of gold to America, which already has locked away in its strong boxes more than one-half of the world's supply. Such a development, if continued, would put an undesirable strain on the currencies of Western Europe in a time of transition back to the gold standard. For political reasons, the federal authorities do not dare admit that they are acting internationally. But no one who follows the course of events, who has noted the several recent conferences of bank heads from England, France, Germany and the United States, can doubt that this is happening. To-day there is a clear understanding among the financial authorities of Western Europe and

the United States; and all important actions are taken in accordance with its terms.

Criticism by the Farming interest is constant and recurrent. Looking back over the last year or two we find that in the summer of 1921 representatives of the farm interest appeared before the Commission of Agriculture at Washington and charged openly that the Board had forced the banks to withdraw credit from the agricultural districts and put it at the disposal of the financial centers. They insisted that the action of the Federal Reserve Board had resulted in a greater contraction of loans in agriculture than in any other line of business. According to them the power of the Federal Reserve System had been directed against the farmer for the benefit of the speculator in securities and commodities. Investigation did not substantiate the accusation. One writer at the time notes:

In the matter of bank loans while the country as a whole increased by 103 per cent, the New England States increased by only 65 per cent. New York increased by 104 per cent. The Middle States increased by 105 per cent; the Southern States by 139 per cent; and the Western States by 163 per cent. It appears, therefore, that the expansion of bank credit was relatively greatest in those sections which are devoted to agriculture. A closer analysis of the figures of loans shows that the growth in these agricultural states was especially rapid after the war.

This same authority goes on:

Without doubt the Federal Reserve system has made minor mistakes in policy during the past two years. The Board has admitted as much and has pointed out specific things which it would do differently in the light of experience. But we must remember that the system was only five years old when it became apparent that the succession of boom, crisis and depression was at hand. At this crucial time the board found itself hampered by the political necessities of war finance, as well as by a lack of experience concerning the exact effect of interest rates and bank contraction upon prices and productive activity. It averted a money crisis in the autumn of 1920. It minimized the number of business failures. It could not restrain the people from acting foolishly in the matter of contracting debts at unheard-of prices. People who

were determined to buy in Nebraska "on the basis of a value of $300 per acre when the banks refused to lend money on a basis higher than $155 per acre" are embarrassed despite the politics of the Federal Reserve Board, rather than because of them.

Whatever accusations may finally be brought against the Board, it cannot fairly be charged that it reduced agricultural prices by a conscious policy of credit contraction in the rural districts. Judging from the attitude of the Agricultural Conference at Washington, the rural community has come to realize this fact.[7]

The policy of the Reserve Authorities has been of late (1929) to use the discount rate as a means of checking the demand for money for stock exchange speculation. This has caused a flow of money (largely British money) to American centers, imports of gold, and a high bank rate in London—raised with a view to checking the export of money by offering equally good terms for its use in Britain.

It is easy to see here the sort of competition for available gold reserves—"the gold rush" as one writer describes it—which the gold standard as at present applied internationally, inevitably sets up.

As an effort to check stock exchange speculation the policy of the Federal Reserve authorities has not been uniformly successful. In the year preceding the writing of these lines three successive rises in the New York bank rate had little or no effect on the volume of brokers' loans. The member banks—the National and other banks which are members of the Federal Reserve banks—gave loyal but vain support to the authorities by restricting their loans to brokers, with the result that the money needed for speculation was supplied by the banks' customers instead of by the banks, but at high rates. These high rates obtainable both for time money and for call loans in Wall Street sucked in funds from Europe, mostly through London, and so put the sterling exchange down to gold point, took gold from the Bank of England in big shiploads at the time of year when it usually replenishes its stock, and forced its rate up.

A great many critics urge that the Federal Reserve authorities

should not concern themselves with attempts to check stock speculation. It is urged that the disease, or supposed disease, involves nothing but the stock market. Admittedly there is no inflation of commodity prices, no loss of efficiency in industry, or any other convincing signs of the business congestion which indicates the approach of a crisis. Business admittedly is in a remarkably healthy condition. Mr. Franz Schneider [8] puts the case:

> Just where the truth lies in this matter is difficult to determine. An impartial and scientific examination of the various aspects of the problem still seems to be lacking. The extravagant claims of some of the "bull" operators are foolish. On the other hand, some of the Federal Reserve pronouncements reflect a strong bias or even resentment over the System's failure to have its way, while some see propaganda more than reasoned statements of facts. Other critics of the market have introduced a moralistic note into the discussion which fails to recognise the economic functions of speculation and which assumes that speculation in stocks is on a lower plane than that in real estate and other forms of business. However, most well-informed persons agree that the question of the height of stock prices is not of evidential value in fixing banking policy. The prime criterion is whether or not there is a dangerous absorption of credit in speculative loans, or an absorption that is detrimental to general business.
>
> On this point the evidence is not conclusive. The mere fact that brokers' loans placed in New York City have risen sharply leaves the question open as it fails to take account of transfers of loans from other districts to New York when new shares are listed and of the change in the method of financing American business in favor of stock issues.

This writer thinks that the discrimination against Brokers' Loans "cuts squarely across the principle that money should always be available—at a price. It substitutes the principle, as far as stock exchange collateral is concerned, of no money at any price." He adds:

> It destroys that right that goes with the ownership of property of being able to borrow on that property. Nothing like it was contemplated in the framing of the Federal Reserve Act. The power it represents is a most dangerous one to be assumed by a politically-appointed board. In addition,

discriminates against one of the most liquid forms of bank investment. And, as a practical matter, it has failed to achieve the end sought—the liquidation of brokers' loans. This attempt to starve out the stock market has failed because the high rates forced in call money have attracted capital from all over the world. . . .

This experience with the "direct action" policy confirms the classic theory that central banks can best exercise a useful influence by applying their efforts to control the total volume of credit, and its price, rather than by trying to control its distribution. Money and capital are too fluid, and human judgment is too fallible, for a central banking organization to be able to direct the relative flow of funds into the different branches of business.

The preceding pages of this chapter, as well as part of the final chapter of this book, indicate why, however we might desire "national independence" in finance, American financial stability is bound up with that of the rest of the world. The financial link is largely gold, the common dependence upon the gold standard. Yet there is no clear agreement between the various national systems as to the use of the gold stock of the world. There arise situations in which each center scrambles for what it deems necessary as a reserve, with the risk of producing a situation something resembling that of a run on a bank. The bank is solvent if there is no "scramble"; but if each obeys what appears to be his individual interest without reference to the whole, the individuals will in fact lose their deposits, a loss which they could have prevented if they could have agreed to act by rules designed to protect the whole. No definite international organization designed to prevent a suicidal "gold rush" at present exists. There are informal understandings between bankers, but nothing very definite and binding.

But such an international organization may now be coming into being. On March 9 the committee of reparation experts meeting in Paris under the chairmanship of Mr. Owen D. Young, issued to the press a summary of their tentative proposals for the establishment of an international banking institution upon which they invited criticism and comment. The main outlines of their suggestions are as follows:

(1) The committee, in deciding to explore the possibilities of such an international bank, has been impressed with the belief that in order to achieve a final settlement of reparation it will be necessary gradually to do away with a great part of the wartime machinery created to collect reparation and for this to substitute, if possible, permanent peace-time machinery.

(2) New machinery may be needed, it is felt, to handle the great new international movements of funds created by reparation and war debts. The substitution of financial for political machinery should, it is believed, transfer the liquidation of Germany's international obligations from the realm of political discussion to the orderly forms of business that characterize a state of peace.

(3) The primary function of such a bank would be at first to act as a trustee, receiving from Germany such annuities as may be arranged and disbursing these among the creditor nations. This would facilitate the making of transfers.

(4) The bank would also finance deliveries in kind, and in important projects coming under the head of deliveries in kind it might in some cases and under proper safeguards finance the residual part of the work.

(5) Such an institution could also coöperate with and act as an essential intermediary between all the interested governments and issuing bankers in marketing such bonds as might be issued for the commercialization of German annuities. It could coöperate with existing banks of issue and might, if desired, receive from these both clearing and investment profits. It might also aid the central banks as serving as a clearing house and as a reservoir for foreign exchange.

(6) The management of the bank would be strictly non-political; it would be international and free from any dominating financial relationships. Upon its directorate would sit only men of experience and international repute. The offices of the bank probably would be in one of the smaller countries, where a suitable legal status and freedom from taxation may be obtained. No city is mentioned particularly, but it is understood that Geneva is definitely stricken off the list because of the desire to disassociate the bank in the popular mind from even a remote connection with the League.

The experts are careful to point out that "should the plan wir final approval the institution to be created would strictly avoid com petition with existing commercial and investment banking institu tions, and would consider it a prime necessity to act in clos coöperation with existing central banks of issue. In fact, the banl

would coördinate and subordinate its activities in any particular country to the policies of the existing central bank of that country. The new bank would in no sense be a 'super bank' to exercise a dominating influence over existing conditions."

Once the problem of fixing Germany's total liabilities has been satisfactorily settled, the intermediate usefulness of an international bank to serve as a trustee for reparation and possible war debt payments is apparent. The possibilities of such a bank, however, go far beyond the narrow limits of the reparation problem. "It could serve as an intermediary between the central banks of the various countries, displacing the informal conferences that are now held at infrequent intervals. It could become a central world clearing house and an international gold depository. It could become a powerful influence in the stabilization of world prices. It could by judicious loans, encourage production and exchange of goods among the nations and develop under international auspices projects in the so-called backward parts of the world for the benefit of the world community generally. Without a doubt such an agency would do much to modify the extreme policies of commercial nationalism which now hinder the progress of world trade. It would take its place along with the League of Nations and the Anti-War Pact as one of the powerful agencies of world peace." [9]

Because it is linked up to the Reparation problem the American government may not at first be able to participate officially in the organization of the Bank, if and when established.

The policy of the administration may mean that some American bank other than the Federal Reserve will unofficially represent American interests in the International Bank. The Young Plan provides for an "Organization Committee," the members which are to be appointed by the governers of the central banks of seven countries. With American policy in mind it is stipulated that:

"If for any reason the governor of any of the central banks shall be unable officially or unofficially to designate members of the Organization Committee,

or refrains from doing so, the governors of the remaining central banks shall invite two fellow-nationals of the governor not participating to act as members of the committee.

Such an expediency of unofficial participation is hardly likely to be the last word of the world's greatest financial and commercial nation in such a matter.

CHAPTER XIII

WHEN THE MODERN MONEY DEVICE BROKE DOWN

A picture of what life was like in great modern cities and communities when money collapsed and became valueless. The greatest monetary collapse in history. A time when the only means of saving was to get rid of money and to secure goods. The nervous fever and recklessness that ensued. The disappearance of fortunes and the vastest confiscations known to history. The suffering of the middle classes. The way in which other states were involved. What caused this orgy? The way in which all the belligerents in lesser or greater degree failed to foresee the financial reactions of war and to make financial preparation. The illusory trust in untouchable gold reserve. The effect of the Treaty of Versailles in rendering financial recovery more difficult. The worst results of bad money at this time, as at most times, were the fruit of public folly.

CHAPTER XIII

WHEN THE MODERN MONEY DEVICE BROKE DOWN

These pages record the recurrent breakdown of the money device in the past. The remoteness of the period with which they sometimes deal might leave the impression that nothing similar has happened in our own time. Yet the greatest collapses of all have occurred within the last decade.

The world is already losing any vivid consciousness of the extent to which, only a year or two ago, in the heart of an ancient, orderly and highly organized civilization, the money device went utterly to pieces; how fortunes disappeared; how the relations of debtor and creditor completely changed from one day to another and how, finally, money became worthless, or of momentary value only and men scrambled to lay their hands on any material object of value in place of it and daily life became utterly disorganized in a "gamble and scramble" for food and clothing.

Yet at that time in the countries most affected, governments of law and order were in power, expert bankers were controlling the monetary machine. How did it get so completely out of control as to inflict loss and want and misery and famine upon millions?

First let us try and get some picture of the conditions.

At the close of the war there was, of course, a great scarcity of materials—particularly coal and foodstuffs—in nearly all the belligerent countries. Mr. Herbert Hoover, who had been administering relief in Belgium during the war and was then at the head of the American relief work in Europe, estimated that at least a hundred millions (equal to nearly the entire population of the United States) were living upon charity in one form or another in the sense that they were not self-supporting. Central Europe suffered most,

and the suffering was prolonged by the blockade of Germany which continued some nine months after the Armistice.

But it was not in this period that the monetary disintegration revealed itself. Just what it meant when it did come we will try to remind the reader. How and why the condition came about we will inquire in a moment.

Let us, as the readiest way of bringing home that already forgotten monetary earthquake, glance at the kind of news from Germany and Austria which we were reading a few years ago.

WHAT LIFE WAS LIKE

The decline went slowly at first. Germany grew accustomed to the slow decline of the German mark and for many months adjusted herself to it in a methodical, if invariably belated, fashion. But when the collapse quickened in April, 1923, and prices rose with startling steepness, the Berlin correspondent of the London *Times* reported on April 23 the emergence of a new phenomenon, the "buyers' panic":

> The effect of yesterday's fall in the mark was at once apparent in the retail shops where a "buyers' panic" at once set in. The general public has been urged by the press not to make more than the most necessary purchases as otherwise a further rise in prices would ensue. Nevertheless, there was a rush of buyers for all classes of goods, with the expected result of a still further rise in prices.

By May 16 misgivings had seized the big wholesale dealers in commodities. Says the *Times* correspondent:

> . . . The dollar went to 46,000 to-day. Foodstuffs have gone up considerably in price. Dealers are already keeping back large quantities of fats for higher prices; the price of margarine has consequently doubled and butter has practically disappeared from the shops.

But by June 1, according to the *Times* correspondent, the full significance of the coming catastrophe began to disturb men's minds

The dollar has reached 77,000 marks. It has come as a shock to a great many Germans to realize that their currency is now in a worse plight than that of Austria, worse even than that of Poland, and that the only one worse than theirs is that of Soviet Russia. The public now knows it. The "flight from the mark" on the Berlin Bourse [stock exchange] to-day transcended anything yet seen. Purchases of dollars are now controlled [by the Government] and all that is left to the public is the market in the shares of industrial companies. The public is putting its money into iron and steel companies' shares as giving it a faint hold on something that may not, like money, melt away in the night. Enormous fortunes have been made by those who had the foresight to be holding iron and steel shares during the last few days.

On June 10 other aspects developed. Says the *Times* correspondent:

Yesterday the mark touched 88,000 to the dollar. The boom in shares on the Berlin Bourse was quite unprecedented. Prices in the retail shops are rising literally "while you wait." The shopping markets are the scene of bitter wranglings, relieved only by grim jests. In a so-called "hunger demonstration" in the streets of Berlin yesterday a man carried on a pole a placard with the legend: "The dollar rose 10,000 marks yesterday; did our wages rise?"

By June 18 the momentum of the fall outstripped the leisurely processes of government discussion:

To-day the price of the dollar advanced from 120,000 to 152,000. It seemed somewhat ironical that the Reichstag Committee was in session to-day, examining the question why it fell to 30,000 marks some weeks ago.

Working-class anxiety deepened as the mark continued its descent. The *Times* correspondent on June 19 reports:

The further sudden collapse of the mark last night, followed by violent fluctuations on all the exchanges, has greatly increased anxiety. The wage-earning classes now read the dollar exchanges as the barometer of their daily expenditures. They have now become so accustomed to seeing the cost of living keep pace with the cost of the dollar that it is natural they should

show signs of alarm when the mark loses one-seventh of its poor remaining purchasing power in the space of a couple of hours; to the German workman the effect is immediately seen in dearer food and shorter supplies. . . . Many small grocer shops are empty because the wholesale merchants refuse to deliver. Butcher shops are closing several days a week as there is not enough custom to keep them open. At Schoenenburg, a working class district of Berlin, there was an attack on the Town Hall because the market stalls would only sell new potatoes at 26,000 marks to the lb., the old ones having been withdrawn from sale. The wages of a Government skilled artisan is now about 45,000 marks per eight-hour day. Lard, which may be taken as a standard of measurement since it bulks very largely in the workman's diet, is to-day 20,000 marks per lb., representing one-half a day's work.

Conditions grew rapidly worse. On July 5 the *Times* notes an outbreak of strikes:

Feeling among the working classes is extraordinarily bitter. Bricklayers are striking for wages of 12,000 marks [8 cents] an hour. Metal workers were offered 9,000 marks [3 cents] an hour and refused. The lowest omnibus fare in Berlin is now 1,500 marks; a little piece of veal, enough to make a stew for two people, costs 60,000 marks.

Rioting broke out in various cities. On July 22 the *Times* notes:

The dollar is now 350,000. There was an outbreak of Bolshevism in Breslau. A large mob raided the commercial center of the town and broke into, and looted, fifty or sixty of the large shops, causing enormous loss to the owners. A "state of siege" was eventually declared and the police used their firearms freely to restore order. Six rioters were killed and a score or more wounded.

On the same day the Berlin correspondent of the London *Daily Mail* telegraphed his paper in some bewilderment:

I was amazed when I found to-day that one had to pay 24,000 marks for a ham sandwich whereas yesterday in the same café a ham sandwich cost only 14,000 marks. . . . Wages, however, are being raised. An unmarried railway guide who has been receiving monthly wages of from 1,900,800 to 2,558,180 marks—according to length of service—will, accord-

ng to the new tariff, now get from 3,801,600 to 4,625,280 marks. The salary of a Cabinet Minister has been raised from 23,000,000 ten days ago to 2,000,000 marks.

July 25 found the sober correspondent of the *Times* gasping at he whirling unfamiliarity of life:

It is hard to know what to say or think with conditions moving as they re. It is like being caught in a typhoon. One holds on and hopes for the est. Last week we were gaping at the idea of getting 1,000,000 marks for pound and now it is 2½ million. For weeks past the Reichsbank has een able to supply the commercial banks with nothing but dumpy packets f 20,000-marks notes, two million marks in a packet. Yesterday even these an out. It is as if the Bank of England were paying out nothing but ennies. Imagine paying for one's dinner with half a dozen packets of aper, each as large as a Bible. The transport of money has become a erious problem.

Berlin, he telegraphed the next day, was like a city under a siege:

The shortage of money has been followed by a shortage of food. Very little eat is obtainable, still less butter and vegetables. There are practically no otatoes.

The *Daily Mail* correspondent reported on July 26 the next stage n the debacle, the inability of the printing presses to turn out sufcient mark notes to meet the demand:

The printing presses are working day and night to supply the Reichsbank ith 2,000,000,000,000 mark-notes daily but there are still not enough to go round. It is difficult to get a check cashed. The 10,000 mark note is e highest denomination printed and the banks are denuded of them. This orning motor-lorries loaded with paper money kept on arriving at the eichsbank but messengers with handcarts were also there to take away e bundles of notes passed out by the Bank. Film operators are taking ctures of the scene. The cashier of my bank handed me 4,000,000 marks 1,000-mark notes, each worth less than half a farthing [one-fourth of a nt]. He obligingly did them up for me in a neat paper parcel which I terwards put on the table of the restaurant where I lunched and unpacked

when the waiter brought the bill. But this difficulty will soon disappear for we expect to have 4,000,000-mark notes by the end of next week. Some people are disconcerted by the extra noughts, but most of them are learning to discard them. Shop assistants, for example, say 500 when they mean 500,000 and on bills of fare at the restaurants the last three noughts are now cut out of prices. Thus 80 means 80,000.

The big Berlin newspaper, *Germania,* became almost hysterical on July 27:

It is a situation for a dictator. The conditions call for a Mussolini in bullet-proof armor with a revolver in either hand.

On that same day the *Times* correspondent noted the long queues of housewives, sitting on camp stools since before dawn outside the food shops, waiting for them to open:

But many shops refuse to open, either because they have no stock or because they are unwilling to sell under the present circumstances.

And the strange predicament of the families at the holiday resorts on the Rhine is described by the *Times* on July 29:

One effect of the financial crisis, reported from the few Rhineland resorts which have visitors in any number, is that guests are being compelled to depart hurriedly, owing to the sharp rise in prices. Families who had obtained hotel tariffs in advance and had provided themselves with the necessary number of millions of marks for a fortnight's holiday, after the receipt of a couple of intimations from hotel proprietors that prices would have to be increased, found that the sums calculated to last fourteen days had been exhausted in six days and hurried home before railway fares caught the infection from food prices.

Another correspondent from Hamburg shows how disconcerting the ceaseless depreciation had become:

In the shops the prices are typewritten and posted hourly. For instance a gramophone at 10 A.M. was 5,000,000 marks but at 3 P.M. it was 12,000,000

marks. A copy of the *Daily Mail* purchased on the street yesterday cost 35,000 marks but to-day it cost 60,000 marks.

The Berlin correspondent of the *Daily Mail* on August 3 reported the next stage:

The mark is becoming the slave of the dollar. We have marks in our pockets but dollars in our heads. For example, my tailor told me that he charges $40 for a suit of clothes. A customer, ordering one, must pay for it the equivalent in marks according to the rate of exchange on the day of delivery.

The country districts, in self-defense, were forced to boycott the towns and cities with their useless "money." The *Daily Mail* correspondent on August 6 telegraphed his paper:

Villagers who used to send butter to Berlin are no longer troubling to do so. They already have crates in their cottages packed with worthless paper money. "Why get more"? A workingman said to me: "We used to talk about the stupid peasants, but now they are laughing at us."

The Reichsbank struggled heroically to keep up with the fast-mounting noughts in prices. One correspondent on August 7 was very hopeful:

The printing presses are going day and night. We are now getting 10,000,000-mark notes in circulation and are soon to have 50,000,000-mark notes.

But on August 9 he was plunged again in gloom:

German money is rubbish. To-day the official quotation for the pound sterling is 21,000,000 marks against 15,000,000 yesterday and 7,500,000 the day before.

The next day he showed how fantastic life had become:

Yesterday my chop at luncheon cost 600,000 marks but to-day it cost 1,500,000. An omelette *aux fines herbes* cost 10,000 marks to-day but to-

morrow it will cost at least 20,000. How people on fixed incomes live is a mystery to me. Butter, 500,000 marks a few days ago, is now 1,000,000 marks. The lack of a stable currency is a strain on the nerves. The chief difficulty is we cannot get money. I myself, for example, am a pauper. This morning at my bank I was told I could not have more than five pence [10 cents], otherwise 500,000 marks. As a favor I was given ten pence [20 cents]. The bank opened again at five o'clock and I went around to get some more money. A long queue was there ahead of me. But the messengers from the Reichsbank had not returned and would not until late at night. Still, I did pretty well. I got ten pence [20 cents]. I must be up with the lark to-morrow to be at the bank when the doors open. In the meantime I am fighting shy of a man to whom I owe 1,000,000 marks. He is a very rich man, but I know he wants those marks.

On August 14 the correspondents note the outbreak of disorder all over the country. One says:

Near Leipzig a so-called Communist Control Committee marched out o town and forced the farmers and large landowners to give up their cattl which were slaughtered on the spot and the meat sold cheaply. In othe places crowds swarmed out into the fields and dug up potatoes. At Hanove men seized the food warehouses; the police fired upon them, killing twelv and wounding about fifty. In the disorders in Luebeck eleven men wer wounded.

And here is a snapshot, dated August 29, of another aspect o money, the cashing of checks:

When checks are presented for payment at a bank, the bank now charge 2 per cent a day on the face of the check until it is cleared. As it take about four days this reduces the value of the check by 8 per cent. Whe checks are presented on provincial banks—which take about ten days to clea owing to the general breakdown—it has been found cheaper to send a me senger to the provincial bank to get the cash. For example, on a chec for £5 [$25] on a Hamburg bank (about 100,000,000 marks) a Berlin ban would deduct 20,000,000 marks for collection whereas a messenger could b sent, at third-class fare, to Hamburg and back, for only 3,500,000 marks.

But investors as well as shoppers were already profoundly di turbed. A man in Berlin who had made a time loan, in mark

with an original value of $250, found himself repaid in full with 15 cents. Investors naturally refused to lend. But many of the German states and cities were in great need of funds. The State of Oldenburg hit upon the device of using rye as a substitute for the mark. It issued in April the first of several "rye debentures," as they were called. Each of these "debentures" had written across the face of it the State's promise to repay on April 1, 1927, enough paper marks to purchase 150 kilograms of rye at the market price on that day. The purchaser of the debenture—in other words, the lender, paid "125 kilograms of rye," that is, enough marks to buy that much rye. The difference, or 25 kilograms of rye, was the "interest" for the use of the marks for the four years.

This loan was successful, and the hard-pressed Municipality of Berlin issued one in oats. This was capped, however, by the semi-official Baden Electricity Supply Company which issued "coal debentures" and secured 1,200,000,000 marks on them. These debentures were in different denominations, of 500, 1,000, 2,000 and 5,000 kilograms of "Westphalian bituminous flaming coal No. IV," based on the price at the mine on the date that the debentures fell due for redemption.

Widows whose husbands had carried life insurance policies for their protection found themselves quite as badly off as other investors, for the policies were worthless. The face value of the policies when paid in marks amounted to only a few cents. Naturally this deterred anybody from taking out further life insurance policies and so the companies sought permission to write future policies in gold or foreign currencies. The government was reluctant to encourage the purchase of gold or foreign currencies but it was forced to make an exception in the case of the insurance companies. The breakdown of money touched life at a thousand points, as well as in the prices of goods in the shops.

Vienna preceded Berlin in the breaking down of her currency and she also preceded Berlin in setting up a new currency out of the wreck of the old. A correspondent of the London *Times* gives a

snapshot of the new conditions which may serve as a sort of prelude to the more dramatic story of German "flight from the mark":

> Prices, of course, are fantastic. Every taxicab bears a card with the printed notice: "7,000 times Fare No. 2." Other prices are from 10,000 to 15,000 times the normal. For example, I bought a block of writing paper the cost of which worked out at 150 kronen a sheet which would have been £6 [or $30] a sheet at pre-war rates but was only half a farthing [one-fourth of a cent] now. No wonder that Treasury notes of less than 100 kronen are no longer in use; they are literally worth less than the paper they are written on for the 100 kronen note is understood to cost the Government 162 kronen to print. . . . The great number of "antique shops" which have suddenly opened in Vienna shows that many household treasures are being sold. Mushroom banks have sprung up in every street, encouraging the people to speculate in shares.

Although the official price index jumped upwards every day and even several times a day, it was impossible for prices in general to keep up with the index and everything in Germany became, to those enjoying the possession of dollars or sterling, amazingly cheap.

Foreigners swarmed into the country to buy "for a song" everything they could lay their hands on, from landed estates on the Rhine and town property in Berlin, to the goods on the shelves in the shops. They revelled in a strange sort of communism, a world in which things of value had become fantastically free. Prices were frantically marked up but they could not keep pace with the soaring price levels and shopkeepers, in their anxiety to convert their stocks into sound foreign currencies, sold and sold. Men called it the "sack of Germany." Travelers entered the country and lived like princes on a dollar a day. They bought fur-lined overcoats for a few dollars, gloves for a shilling. Even precious stones which nominally enjoyed a stable value became "cheap."

The first visible effect of the breakdown of the money machine was thus a free transfer of enormous wealth, largely in the form of transferable goods, from Germans to strangers. Eventually the Government intervened and forbade the export of goods from the

country except under special license. Departing tourists were stopped at the frontier and searched, precisely as men are searched for "loot" and if they could not show a license for the things they had bought in Germany, the things were confiscated. It was effective, but it came too late.

Within Germany there was a similar transfer of wealth from one group to another. Those who had loaned money to others found themselves repaid in worthless marks. Debtors walked off scot-free. Mortgages were repaid "in full" at one-ten-thousandth of their original value. The German Government, the German States and the German municipalities found their funded indebtedness melting deliciously away while those solid classes who had invested in the "gilt-edged" securities of their country found their investments turned to worthless paper. All the fundamental canons of bourgeois society were turned upside down. Those who saved money, saw their savings melt in the night, so men began madly spending. As soon as they received "money," they instantly turned it into goods or consumed it according to their temperament. A wild "night life" evolved, particularly in Berlin, to meet the frantic desire of men and women to turn the treacherous stuff called "money" into pleasure while it could buy pleasure.

The towns and cities suffered acutely from lack of food as the farmers were naturally reluctant to sell their products for depreciating paper money. War-time conditions prevailed for months. Food became inordinately dear except for those who possessed American or British bank notes. Until the Government began printing notes in large denominations of 1,000,000 marks or more, the simplest transaction in a shop required a suitcase full of notes in 1,000-mark packages. Behind every counter were shelves loaded with these bundles of notes, the "small change" for the simplest purchase. The familiar "cash register" was idle,—it could not cope with calculations in hundreds of millions of marks.

Wages were based on the official index of prices but they, like everything, lagged behind the grotesque realities of the situation.

Millions, it is true, lived without paying rent but the dearness of food and clothing more than cancelled out the blessing of that régime. Food subsidies came to the rescue of the town populations but those subsidies accelerated the fall of the mark. The official index of prices became an astronomical calculation. Given the price level of 1913 as equal to 100, it rose from 147,479 in December, 1922, 75,570,000,000,000 in November, 1923. Milliards and billions replaced the familiar integers of everyday life.

The middle classes suffered intensely. Salaries lagged far behind wages in being adjusted to the soaring mark. It is estimated that their standard of living fell to about one-fourth of the pre-War standard. The utter hopelessness of their material outlook drove them into an almost feverish search for intellectual satisfactions.

One testimony is as follows:

> The middle classes, forced down to a starvation level, under-nourished, under-clothed, unable to afford education fees and deprived of all power to enjoy the pleasures of life, went through a period of ever-growing martyrdom; they could not afford books, or pictures, or even music, and lived in an atmosphere of struggle without a gleam. Yet they withstood the test. Their victory was less spectacular than a victory on the battlefield enshrined in the magnificence of war, but it was not less real, not less noble, not less worthy of lasting honor. In those years, when a frenzied juggling with the materials of existence represented life in a world of cultural and social relations, the power of thought, of abstract speculation, of artistic or literary creation came vividly, at moments, to expression. In the cafés, the art centres, theory was passionately discussed and wordy conflicts were staged round aesthetic and philosophical doctrines.[1]

WHAT CAUSED THE COLLAPSE?

The collapse of the German and Austrian currencies after the Great War is one of the most amazing chapters in the long and checkered story of money.

It is true that after the emergence of the Bolshevist régime in Russia the depreciation of the old Russian rouble rivalled that of the

German mark and the Austrian crown, but it was very different; it was due to a deliberate jettisoning of the old rouble by those who, planning a new economic order, wished to wipe out the last vestige of power remaining in the bourgeois class. Before the war an American half-dollar could have been exchanged, very nearly, for one Russian rouble, but by 1918 it could have purchased 100 roubles, by 1921 more than 80,000 roubles and ultimately 100,000,000 roubles. But Russia was isolated from the world. She had already, by the repudiation of her debts in 1918 and the confiscation of all foreign concessions, inflicted upon the outside world the maximum damage and loss, and the fall of her exchange was therefore witnessed with comparative indifference.

In the case of Germany, on the other hand, the collapse of the currency from 1920 to 1923 sent shock after shock throughout the world. The German mark lost its primary function of measuring prosaic values in goods and services. It became a political barometer, a fluctuating index to political emotions. It inflicted heavy losses on foreigners who speculated in it or ventured to trust themselves upon it, as many did.

What, fundamentally, is the explanation of the failure? Let us look at certain facts. During the war the highly disciplined German population had obediently followed the instruction of the Government regarding its money. It had obediently turned in all, or very nearly all, the gold which it possessed and it accepted the paper money issued to it as quite as good as gold. This paper money consisted of the notes of the Reichsbank and of the Loan Bank; in addition the banks were allowed to extend credits to customers on the strength of the Government's three-months Treasury Bills which they held. All three items contributed to increase Germany's "paper" circulation to a total volume in 1918 of about five times its pre-war volume. But prices had not increased in proportion; they had been rigidly fixed by the Government and had merely doubled.

But as soon as the Blockade ended—nine months after the close of the war!—and it was no longer necessary or possible to ration

the necessities of life at fixed prices, the superabundance of paper money was immediately reflected in prices. In 1919 they doubled again, increasing during that one year more than they had during the four years of the war.

Furthermore, as soon as the Blockade was lifted and Germans, in sore need of foreign supplies of every sort, began almost frantically importing, the German mark once more began to figure in the foreign exchange markets. Thereafter, Germans learned to consult two different indices whenever they had any transactions involving money. One was the domestic "price level" of wholesale and of retail commodities as officially calculated. The other index was the standing of the mark in other foreign currencies.

Both grew slowly worse during 1919 and thereafter, but they moved at different rates, and men found it extremely difficult to calculate just what the mark was "worth." This popular confusion played steadily into the hands of the more astute. The latter became remarkably adept at juggling with these ever-shifting values.

One of the most successful bankers in Germany to-day is a man not yet middle aged, who, wounded in the war and out of work on demobilization, drifted into the world of finance, a novice without experience or credentials. But, surprised and interested by the misbehavior of money, he applied himself to a realistic study of the subject and developed rapidly so much intuition in forecasting its movements and in utilizing them to his own advantage, that he built up a large and solid fortune.

But to most Germans this business of money was a baffling and terrifying thing. Whatever happened, they seemed always to lose.

What was slowly bleeding all the familiar values out of the German mark was the steady increase in the number of paper marks in circulation. The German Government ended the war with a debt of 147,000,000,000 gold marks of which 89,000,000,000 marks had been "funded" that is, set aside in "war loans" to be repaid to the lenders in the future though with heavy interest payments falling due each year. The remaining 58,000,000,000 marks was "floating

debt." That is, large blocks of it were coming due for payment every few weeks. The taxation available to the German Government at the end of the war was insufficient to cover more than one-tenth of this floating indebtedness. It could not be "funded" because the real savings of the German people had been exhausted. They had no surplus which they could lend to the Government to meet these heavy payments. Only two alternatives seemed to present themselves. One was to default on these obligations; the other was to meet them by borrowing from the Reichsbank freshly printed paper notes which were presented for payment. The Government chose the latter course and ended up by, in effect, embracing both courses; for the depreciation of the mark eventually resulted in the virtual repudiation of these debts at the expense of the creditors.

But it was the impossibility of meeting the demands for Reparation payments in the exhausted state of Government finances which finished off the mark. The payment of 1,000,000,000 gold marks in August, 1921, as a result of the London Conference, followed by the payment of 362,000,000 marks in March, 1922, and the Treasury Bills hypothecated to Belgium in August, 1922, valued at 254,000,000—a total of 1,622,000,000 marks (£81,000,000)—relaxed what little grasp the Government had on the declining mark.

For the value of the mark became in men's minds a problematical thing. It had nothing to do with gold. Men tried to estimate its value by the probability that some day it would be converted into a sound currency based on a settlement of all the difficulties, domestic and foreign, with which the country was beset. As those difficulties increased and the probability of stabilization grew more remote, the mark sank.

In July, 1921, the American dollar was equal to 81 marks, but the assassination of Dr. Walther Rathenau, Germany's leading industrialist and one of her foremost statesmen, in June, 1922, sent the mark tumbling to 600 to the dollar. In July, after the payment authorized by the Cannes Conference of 362,000,000 marks had been transferred to the Allies, the mark slipped to 670 to the dollar. In

October, after the payment to Belgium, it dropped to 4,500 to the dollar and thirty days later it fell to 8,000. On January 9, 1923, when the Reparations Commission took its formal decision to enter the Ruhr and cut that industrial center off from Germany until Germany met the Allied demands, the mark fell to 10,200 to the dollar; a few months later, in July, the mark reached 1,000,000 to the dollar and fell thereafter at a constantly accelerating rate.

In the end, of course, the mark had to be abandoned, but not until it had fallen to almost unplumbable depths. The new unit, the Rentenmark, which succeeded it as a temporary form of money in 1924, was officially valued as worth 1,000,000,000 marks, but this scarcely conveys the devaluation which it had received in men's minds. Its havoc, in terms of life, had been incalculable. It had inflicted rickets on a whole generation of under-nourished babies, it had stopped schools, it had crippled the colleges and universities; it had transferred real wealth from weak hands to strong; those who had trusted it for a week, a day, an hour, fell with it, while those who juggled with it rose.

The collapse of the other Central European currencies was very much the same. The Austrian crown collapsed from, in the main, the same causes and produced similar effects. On September 1, 1919, one million Austrian crowns were equal to $24,000, but on December 31, 1922, they were "worth" only $14. At that level the currency was stabilized under the auspices of the League of Nations and with the aid of an international loan and a general reorganization of the country's finances. The breakdown, in the meantime, had produced on a smaller scale all the phenomena seen in Germany,—the impoverishment of the working and middle classes, the confiscation of all vested incomes, the dislocation of classes, the "looting" of the country by foreigners, and a general lowering of morale.

SOME OUTSTANDING ERRORS

"The Great War," says R. G. Hawtrey, the British Treasury expert, in his volume on "Currency and Credit," "is conspicuous among all the wars of history for unsound finance."

At the outbreak of war in 1914, not a single one of the great European belligerents appears to have had a feasible plan ready for the proper handling of its money or its credit during the long anticipated struggle. London, Paris, Berlin, Vienna and St. Petersburg were alike in this. The Treasuries, it is true, had gold, but were without clear-cut plans for using it.

The point of contact of the Governments with their respective money markets was, of course, the central bank of issue,—in London the great Bank of England, in Paris the Bank of France, in Berlin the Reichsbank, in Vienna the Austro-Hungarian Bank. To these semi-official banks they turned.

These great banks had vaults full of gold, which was a comfort, but they had, events would seem to show, no predetermined policy. They, in turn, hurriedly summoned the big private bankers to conferences. These conferences constituted in each of the capitals a sort of hastily improvised "general staff" for money and credit. There slowly ensued a long series of tardy improvisations of policy which passed, in those uncritical days, as "financial statecraft."

The great reserves of gold held by the central banks theoretically "covered" the huge issues of notes which they made. But as no one could get to this gold this "cover" was in a sense an illusion. On this point Professor T. E. Gregory of the London School of Economics says:

"It was probably inevitable that the central banks should lend themselves to the financial exigencies of their governments, but apart from this, throughout the war the central banks were guilty of absurd delusions as to the value of gold reserves at a time when their notes were inconvertible and their gold reserves could do nothing to maintain their value." [2]

German preparation for the war, on the financial side, consisted almost solely in the determined accumulation of gold. By July, 1914, it is estimated that the gold in Germany amounted to about $1,000,000,000, of which $687,000,000 was coined and in circulation, and about $313,000,000 was in the form of bars,—held in the Reichsbank and the four smaller note-issuing banks as "cover" for the notes which they issued. Anybody who wished to do so, could present those notes at the head offices of the bank and get gold for them. The Reichsbank's gold reserves, including bar gold and coins, on the outbreak of the war amounted to $344,000,000, equal to 66 per cent of all her note issues. And in the country, freely circulating, were more than $550,000,000 in gold coins and $150,000,000 in silver, against an extremely modest paper currency of bank notes amounting to $500,000,000 and Treasury notes amounting to $48,000,000.

This gold in the Reichsbank—not to mention the gold in circulation which was freely and patriotically turned over to the Reichsbank during the war—could have supported a very large volume of paper money. That paper money, the notes issued by the Reichsbank and the four other banks, could have passed from hand to hand "as good as gold," providing that men felt assured that they could get gold for it on demand.

But on the outbreak of the war, the convertibility into gold of the Reichsbank notes and the Treasury notes was suspended, and for all practical purposes the vast reserves of the Reichsbank were idle.

The German population was extraordinarily trusting. It did not begin to hoard gold. In response to patriotic appeals, men and women took their gold coins to the banks and accepted marks for them and the banks, in turn, sent the gold to the Reichsbank, so that the latter within two years had nearly doubled its stock of gold. That huge reserve of gold made, of course, an impressive showing on the books of the Bank and the German public probably took certain comfort in its size but the neutrals were less impressed.

The export of gold from Germany—as from all the belligerents—

was formally prohibited but this merely meant that private citizens could not export gold. The various belligerent Governments were free to do so and, in fact, were forced to do so. Having subtly dishonored their own currency at home, they found it dishonored abroad, and when other means of paying for supplies were lacking, they were forced to draw on their gold reserves and send gold abroad.

The result was that the gold in the central banks of the belligerents and in circulation among their populations declined $1,247,000,000 between 1913 and 1919.

Of this loss of $1,247,000,000, about $720,000,000 went to the European neutral countries and the remainder, $527,000,000, went partly to the United States and partly "disappeared from circulation."

The $720,000,000 which went to the European neutral countries, principally Holland, Switzerland, Spain and the Scandinavian countries, caused an upheaval in their currencies. In 1916 the Scandinavian countries, to protect their currencies from this unwanted gold, authorized their central banks to refuse gold. The gold which went to the United States caused a spectacular inflation of the currency there.

The French followed the German policy when it came to gold reserves.

The Bank of France early adopted the policy of gathering gold. At the outbreak of the Great War its gold reserves stood at the enormous figure of 3½ milliards of francs, say $700,000,000 (double that of the Reichsbank), and its reserve of silver amounted to 500,000,000 francs or $100,000,000.

Furthermore, at the outbreak of the war gold began to pour into France. Frenchmen who had deposits abroad or moneys owing them abroad, promptly demanded their return, in francs. This created in all the exchange markets an enormous demand for French francs which promptly became so expensive that it was cheaper to ship gold. French francs commanded a premium in New York until the end of 1914. (The same phenomenon occurred with all the belligerents; in the exchange markets their currencies,

instead of being depressed by the outbreak of war, went probably to a premium.)

France, then, was in a remarkably strong position as regards gold reserves, if gold reserves were of any value. Her paper currency consisted of the notes of the Bank of France which were redeemable in either gold or silver, at the option of the bank. In normal times the bank redeemed them in gold on demand, but it was always bar gold or foreign gold currency, and in times of stress the bank charged a small premium for the gold. She had, then, two safeguards against the dissipation of her gold reserves. Any panic-stricken Frenchman who tendered bank notes must accept silver —and silver was a thoroughly satisfactory substitute to the average Frenchman—or if he still insisted upon gold, he must take inconvenient bar gold or British sterling or American dollars.

The Parisian population did, as a matter of fact, at the outbreak of the war, start the conventional "run" upon the Bank of France. It was automatic, prompted by fear, like any "run" upon any bank, public or private. The financial authorities met this demand by suspending indefinitely the convertibility of the franc into gold.

The psychological effect of this upon the population was that every French peasant or shopkeeper who had a small hoard of gold or silver was made to feel that he had something of special value. The official policy, or lack of policy, tended to petrify these hoards and in their totality they were enormous.

Like Germany, France had no plans for additional taxation. No additional taxes were imposed until 1916. From the outset the war was financed by borrowing from the Bank of France and by the issuance to the public of short-term "bons de la defense nationale" in small denominations. This was nothing but a thinly disguised huge floating debt. The Government's two debts, the one to the bank and the one to the public, fairly raced with each other. By December, 1914, the debt to the bank reached 3,900,000,000 francs or $780,000,000. Finally it became impossible to carry on this improvident policy and in November, 1915, the Government issued its

first long-term obligation for 15,000,000,000 francs, or $3,000,000,000 which the public could subscribe for by tendering the doubtful "bons de la defense nationale" or by cash. Thereafter, similar long-term loans were floated on an average of once a year.

None of these war-time currencies was too far gone at the close of the war for recovery, given peace and constructive statesmanship. The European populations were eager to get back to work, to repair the ravages of the war, to resume normal industrial life. They craved more houses, better food, lower prices.

Unfortunately for both leaders and led, the Peace of Versailles barred the way to recovery. Its terms, conceived in a fierce spirit of suspicious, yet victorious, Nationalism, lay across the path of European construction for the next decade, preventing international cooperation and paralyzing national initiative.

This is not the place to go fully into its economic effects. Briefly, its most serious injury to currency recovery grew out of the fact that it invited procrastination. Why should the populations of the victorious Allies set about the painful task of improving their financial condition when a huge indemnity from Germany would, as was widely believed, suffice to do it?

Mr. Lloyd George's keynote in the "khaki election" of December 14, 1918, was: "Hang the Kaiser and let Germany pay the cost of the war." This inviting program made a wide appeal to the war-weary populations of Britain, France, Belgium and Italy. Few politicians saw the danger, or if they did, they were silent.

Everything waited upon the amount of reparations which could be secured from Germany. It was 1921 before the gross total was even fixed—at 132,000,000,000 gold marks (about £6,600,000,000 or $33,000,000,000) which was 30,000,000,000 gold marks above the grand total of the inter-allied indebtedness.

This $33,000,000,000 was to be paid by a defeated country which had lost an annual income from its foreign investments of £75,000,000, had lost from 11 to 15 per cent of its productive capacity, had lost its mercantile marine, had made immense forced

deliveries of railway cars, locomotives, rolling stock, chemicals, dyes, agricultural products, coal and coke and had suffered the disruption of its main economic asset, the Ruhr-Lorraine-Luxembourg industrial unit.

To meet the Allied demands and the demands of her huge war debt, both funded and floating, would have required from Germany the fantastic annual burden of £850,000,000, or $4,250,000,000,—more than three times and almost four times, the annual debt burden of the rich and prosperous United States.

Economists were quick to point out the impossibility of her carrying any such load but they were regarded by the triumphant Allied politicians as "defeatists" and were ignored. The Allied statesmen, having promised their people that substantial payments by Germany would be sufficient to set their respective national currencies in order, were reluctant to reverse themselves and attempt the disagreeable task themselves. The depreciation of their currencies steadily continued until, in the end, so much ground had been lost that it could not be recovered.

France, making the best of the situation, was forced in June, 1928, to create a new currency based on a franc worth 3.9 cents (as compared with the pre-War franc of 19.3 cents); Belgium, similarly, in October, 1926, created a new currency with a unit called the "belga" worth 13 cents; Italy, in December, 1927, established her currency after great difficulty, on a new lira worth 5.2 cents (against a pre War value of 19.3 cents). The difference between the new and th old currencies was no piece of legerdemain, leaving condition untouched. It was a direct loss in property and income sustained b the entire rentier class in those countries,—the owners of governmen and other bonds and the owners of mortgages, originally payabl as to principal and income in the old currencies, who were forced t accept payment in the new. It was a confiscation of property on huge scale, and produced a profound disorganization in the nationa life of those three "victorious" countries.

The worst results might have been prevented if, on the morro

of the war governments had not shared or been driven by the follies and passions which blinded the mass in every belligerent nation. Even when they did not share those passions politicians were frightened by them and feared to stem the tide by telling the truth. Mr. Maynard Keynes, the British economist, who was in a position to know what went on, has written on this aspect of the question. He sums up:

> Mr. Lloyd George took the responsibility for a Treaty of Peace that was not wise, which was partly impossible, and which endangered the life of Europe. He may defend himself by saying that he knew that it was not wise and was partly impossible and endangered the life of Europe; but that public passions and public ignorance play a part in the world of which he who aspires to lead a democracy must take account; that the Peace of Versailles was the best momentary settlement which the demands of the mob and the characters of the chief actors conjoined to permit; and for the life of Europe that he had spent his skill and strength for two years in avoiding or moderating the dangers. . . . The public history of the two years which have followed the Peace exhibit him as protecting Europe from as many of the evil consequences of his own Treaty as it lay in his power to prevent, with craft few could have bettered, preserving the peace though not the prosperity of Europe, seldom expressing the truth, yet often acting under its influence. He would claim, therefore, that by devious paths, a faithful servant of the possible, he was serving Man.

But that claim would ignore a good deal—the fact, for instance, that by "talking as much folly as the public demand," the statesmen increase the power of the folly which they have to meet.

And, again it must be said, our fortunes are at the mercy of such public folly, as this history shows.

CHAPTER XIV

THE GREAT MONETARY PROBLEM: WHAT THE EXPERTS SAY

[BY H. V. HODSON, B.A., OXFORD]

A classification of the views of leading economists on the methods by which we might correct the great defect of money—its instability of value. What is stability of value? What is wrong with gold? The demonetization of gold—Mr. Keynes' plan—Mr. Wicksell's—Mr. Taylor Peddie's—Mr. D. H. Robertson's view. The case for gold. Professor Gregory. Professor Irving Fisher's "compensated Dollar". Professor Taussig's opinion thereof. Professor Carl Snyder's plan. The dollar as the world standard. Mr. Hawtrey on the gold exchange standard and international coöperation. Have banks the power to make money stable? A comparison of the Bank of England and Federal Reserve methods. A bibliography.

CHAPTER XIV

THE GREAT MONETARY PROBLEM: WHAT THE EXPERTS SAY

WHAT IS WRONG WITH OUR MONEY?

THE complaint which most of us would bring against money is that we have not enough of it. But monetary reformers lay at its door other accusations which are peculiar to money itself and have nothing to do with the individual possessors—or coveters—of it. Most of them say that money is "unstable"; that is to say, a dollar this year will buy only a fraction, say two-thirds, of what it bought five years ago; or it will buy what it took a dollar and thirty cents to buy ten years ago. Of course this refers to prices of things in general and not to particular goods; wheat, for instance, will be cheaper in a year of good crops, or rubber dear because the output is controlled. It is because we are accustomed to happenings of this sort that we usually think of price changes as caused by the goods or by the sellers of goods and not by the money which purchases them; but the rise or fall of prices may also be regarded as a fall or rise in the value of money, caused by a decline or increase of its quantity. When Dr. Johnson was told that in the Island of Skye eggs were only fourpence a score, he deduced "not that eggs in your wretched island are plentiful, but that pence are scarce."

Either a rise or a fall in the value of money, if considerable and unregulated, creates economic disturbance and social injustice. A man has labored for forty years to save sufficient for an annuity. When he gets it the rise in prices is such as to make it quite inadequate—worth in goods much less than was the money which he actually paid in. All people, such as pensioners, who live on fixed incomes suffer from a rise of prices, and so do wage-earners whose incomes take time to adjust to the rising cost of living. From a fall

in prices other classes suffer equally badly; the farmer buying a farm and leaving half on mortgage may find that a considerable fall in the price of his produce will ruin him. Long-term contracts are impossible with very unstable money. Many economists think that it is mainly the instability in the value of money which accounts for the instability of business, the "business cycle" of depression, boom, and again depression.

That in outline is the indictment of instability. But there is another indictment brought by some, though fewer reformers. It is that money fails in its task of getting what is produced rapidly and without friction into the hands of those who are to consume it, and has been stated by Messrs. Foster and Catchings thus:

> Progress towards greater production is retarded because consumer buying does not keep pace with production. Consumer buying lags for two reasons: first, because industry does not disburse to consumers enough money to buy the goods produced; second, because consumers, under the necessity of saving, cannot spend even as much money as they receive. There is not an even flow of money from producer to consumer, and from consumer back to producer. The expansion of the volume of money does not fully make up the deficit, for money is expanded mainly to facilitate the production of goods, and the goods must be sold to consumers for more money than the expansion has provided.[1]

THE REMEDIES PROPOSED

The complications which this passage exposes—and there are many others, as we shall see—lead us to expect that stabilization naked and simple is not the ideal of all monetary reformers. Indeed the participants in this controversy might be classified thus:

1. Those who, for want of what they believe a better and a practicable plan, accept the gold standard as it is, while possibly modifying the credit structure that is based on it.

2. Those who for the sake of stabilization would reorganize the gold standard by some preconceived method of manipulation.

3. Those who for the same reason would abandon the convertibility of money into gold.

4. Those who favor the stimulation of business by a gradually or occasionally rising price level—the "gentle inflationists."

5. Those who, if not in favor of deflation would accept it if necessary as the price of retention of gold, and who would apply it in special circumstances if not as a permanent aim.

6. Those who propose the creation of "consumers' credits" by one means or another.

This classification is, as of course it must be, very rough and ready, and to a certain extent the categories overlap. Nevertheless we may use it to group some of the more prominent modern economists as follows:

1. Pigou, Hartley Withers, Cannan, Gregory, Taussig, Lawrence, Nogaro, Commons.

2. Irving Fisher, Lehfeldt, Cassel, Hawtrey, Snyder, Bellerby, McKenna.

3. Keynes, Wicksell, Lewis, Peddie, Dick.

4. Robertson, Henderson.

5. Among those who at one time or another have urged deflation are Cannan, Gregory, Kemmerer, Nogaro.

6. Foster and Catchings, J. A. Hobson, Major Douglas and his school.

This classification gives little hint as to the means by which it is proposed that stabilization should be achieved. The methods suggested include:

1. The gold exchange standard and the international coöperation of central banks.

2. A reorganization of the banking system for the better direction and greater flexibility of credit.

3. Control of gold movements or of gold output.

4. The "compensated dollar."

5. Direct "management" of the currency guided by price indices.
6. Discount rate and "open market" policy (with which may be classed the so-called "interest standard.")*

THE NEED FOR STABILITY

As yet we have only a very inaccurate idea of what we mean when we say that the value of money is unstable. The phrase implies a notion of the "purchasing power" of the dollar which we acquire probably through our painful acquaintance with the "cost of living." When all prices move together the matter is simple enough, but when some rise and some fall we can only say vaguely that on the whole prices have gone up or down; by means of index numbers however, economists have given mathematical precision to the conception. The fluctuation of the general price level as reflected in an index of prices of representative commodities, then, constitutes the instability of the value of money. The first chapter of this book gives the views of a large number of economists and business men on evils of fluctuation. As Dr. Karl Helfferich puts it:

> Changes in the value of money, no matter in which direction they take place, produce conditions which create serious alterations in the distribution of income and wealth, disturbances in the bases of all economic transactions and accordingly in the economic life of the community.[2]

This still needs elaborating, and the following quotation from Mr. J. A. Hobson, the English economist, describes more fully some of the reactions of a rise of prices.

> Rising prices affect different classes of income and property very differently. Persons living upon the interest of consols or other public funds, preference shares or debentures of public companies, mortgages, pensions, loans, leases or other fixed payments, suffer losses proportionate to the rise of prices.

* Note that this enumeration does not correspond to the categories of the preceding classification.

Others, living upon payments slowly adjustable, suffer loss according as the rise of prices is more rapid than the process of adjustment. Persons whose incomes are obtained by selling goods or services for sums not fixed by law, contract or custom, but varying quickly with the conditions of the market, ought, in strict economic theory, to suffer no injury from a rise of prices. Indeed they ought to be gainers to some extent, reaping a benefit at the expense of the persons with fixed incomes. . . . Since most creditors are relatively rich and most debtors relatively poor, it might appear that this result of rising prices would tend towards a more even apportionment of wealth. And so no doubt it would if the rise of prices had been equally applicable to all sorts of goods and services. But it has not. As regards the consumable commodities upon which the greater part of most incomes is expended, the most necessary classes of commodities have been subjected to the highest rise of prices.[3]

More than a century ago, the famous Select Committee of the British House of Commons on the High Price of Gold Bullion levied precisely the same criticism against the rising prices which followed the suspension during war time of the Bank of England's obligation to exchange notes for gold.[4]

It is obvious that the opposite movement of prices would on the whole tend to produce contrary changes in the distribution of wealth. But the working classes may nevertheless lose all round through the unemployment caused by the depressing effect of falling prices. Messrs. Foster and Catchings have summed up this other aspect of price movements.

In a profit-seeking world, a fall in prices brings an end to increased production—an end, consequently, to progress towards higher standards of living; brings also, those alternations of extreme prosperity and extreme depression which have long seemed inexplicable. In fact, as statistics of employment and production show throughout the world, the expedient of reducing prices, far from aiding society to advance towards its economic goal, actually throws society back for a loss. In other words, deflation brings about an adjustment of supply and demand, not by increasing consumption, which is one of the aims of society, but by decreasing production, which defeats that aim.[5]

Professor Irving Fisher has further described the secondary evils of price fluctuations—"speculation, uncertainty, crises, depression,

resentment, violence, ill-considered 'remedies' and unemployment due to the periodic dislocation of trade." [6] "The real criterion for the interest policy of the banks is therefore maintenance of a controlled price level." [7] But that is not as simple an aim as it sounds.

> Fixity of value is a conception which itself calls for explanation. . . . The index number ought to be based on *all* commodities, weighted according to their consumption, and it ought even to embrace services, but only *consumable* commodities or services, for otherwise raw materials and intermediate services would be counted twice over. . . . But then what allowance is to be made for a general scarcity or general abundance of commodities? . . . The better alternative seems to be to aim at making the consumers' outlay constant. But, of course, it must not be absolutely constant; it must vary with the population, and must also vary in some way with the quality of the work they do. If that ideal could be attained, the value of the monetary unit in terms of human effort could be kept fixed.
>
> But this is not the only possible solution. The monetary unit is employed for the measurement of debts. The purpose of fixing its value is to preserve justice as between debtor and creditor. . . . What the lender of money consents to defer is his consumption of commodities, and it would seem to follow logically that what he should receive back is the same command over consumable commodities as he surrendered.[8]

Another English economist, Mr. D. H. Robertson, suggests that an index number of the *transaction* value of money, in which considerable weight is attached to wage payments, would be better than the ordinary wholesale price index as a governor of price policy.

WHAT IS WRONG WITH GOLD?

Since the War we have seen country after country striving for the establishment of the gold standard as the zenith of sound monetary policy. The United States, which stuck to the gold standard, has escaped most of the financial troubles only too obvious elsewhere and indeed has often prospered while other countries remained depressed. What reason is there then for complaining against the gold standard? Before trying to answer that question, let us get clear

nto our minds the fact that changes in the price level may be divided nto the tide, or the long-period trend, and the waves, or the short-period fluctuations, associated with the "business cycle." The remedy or the one evil may not necessarily cure the other, and indeed conomists have sometimes been involved in futile argument because hey have mistaken each other's conception of the problem to be olved.

The elimination of the short-period waves is probably to be sought s much in policy as in principle, as much in the outlook of bank-rs and governments as in the legal structure of the currency which hey use. The alleged instability of gold is essentially a long-period henomenon. If by law currency is exchangeable for gold, and ice-versa (the gold bullion standard), or if full-valued gold coins re in circulation, then plainly the purchasing power of gold equals he purchasing power of money; and although there are theorists vho hold that the value of money determines the value of gold ather than the contrary,[9] it is clear that evidence of the fluctuating alue of gold in terms of commodities in general would prove the old standard to be, for whatever reason, to that extent an unstable ne.

The accusation against the gold standard has been brought by rofessor Irving Fisher in these general terms:

> The truth is, that the purchasing power of money has always been unstable. The fundamental reason is that a unit of money, as at present determined, is not, as it should be, a unit of purchasing power, but a unit of weight.[10]

ut that in itself proves nothing unless the unit weight of precious netal has a widely varying purchasing power.

For a concise statement of pre-war gold fluctuations, we must rn to Mr. D. H. Robertson.

> The conduct of that (the gold) standard in the century before the War was ndeed far from exemplary. The behavior of wholesale prices is not a com-

pletely satisfactory test; but taking it for the moment for want of a better, w find that in England between 1821-25 and 1846-50 wholesale prices fell b 25 per cent; between 1846-50 and 1871-75 they rose by 20 per cent; betwee 1871-75 and 1894-98 they fell by 40 per cent; between 1894-98 and 1909-1 they rose by 30 per cent. That the gold standard provided on the whole healthy stimulus to industry in the second of these periods is possibly tru but largely fortuitous and due to unforeseen happenings both in the digging of California and Australia and in the banking world of London. That b permitting a great fall in prices it reflected the great increase in the world productivity in the third period is also true, but again partly fortuitou and let us not forget the great agricultural decline, and the unemployme and labor ferment of the eighties.[11]

The world gold situation was completely changed by the wa which forced almost all European currencies off the gold standar The following table[12] illustrates the revolutionary change whic occurred in the distribution of the world's gold reserves.

Monetary Stocks of Gold in Relation to World Gold Reserves

	1913	*1925*
	percentages	
Europe	58.8	31.6
United States of America	19.2	42.9
Other American Countries	6.5	9.6
Asia	11.0	11.5
Africa	2.3	1.3
Rest	2.2	3.1
	100.0	100.0

The domination of the United States, which will be referred to lat is by no means the only present difference from the pre-war g situation. Fewer countries are on a gold standard so that the ba of fluctuations is narrowed and *ceteris paribus* the amplitude of fluctuations enlarged. Every time a country returns to the g standard the position is disturbed, though now that the chief co tries of Europe have trod that thorny path the magnitude of the

urbances is slight. Much less gold is hoarded now, and gold coins ave practically ceased to circulate in Europe. Several countries have ied their currencies to gold only indirectly through an obligation o exchange for currencies themselves convertible into gold, and a urther possible ground of instability is furnished by these gold xchange reserves, which, according to Dr. Mlynarski, constitute 9 to 20 per cent of the world stocks of monetary gold.[13] These conomies in the monetary use of gold have greatly contracted the lemand for it and therefore depreciated its value, which is now enerally agreed to be about two-thirds of its pre-war level. In other vords, gold prices are now 50 per cent higher than in 1913.[14] As or the future, Professor Gustav Cassel wrote in 1921, "We have to eckon with the fact that the world's production of gold has be-ome, definitely, insufficient for the rate of progress which we used o regard as normal before the war."[15] His assumption that, if ie price of gold is not to increase, a given rate of economic progress equires an equal proportionate increase in the world's gold supplies, as, as a matter of fact, been called in question, and indeed Professor ehfeldt believed a fall in the value of gold to be more probable ian a rise;[16] yet the very indeterminateness of the relationship be-veen gold output and prices might be regarded as all the more ason for taking measures to control instead of fixing the connec-on between money and gold.

In any case (writes D. H. Robertson) the very uncertainty of the future of e value of gold establishes the point. It is difficult to regard as very stable sacred a standard of value which is liable to be upset by the discovery of w mines or processes of mining, by a decision on the part of some State to hieve the gold standard or of some other State to abandon it, by a sloughing f of the hereditary taboos of the Indian ryot or the London banker. The lue of the yellow metal, originally chosen as money because it tickled the ncy of savages, is clearly a chancy and irrelevant thing on which to base e value of our money and the stability of our industrial system.[17]

THE DEMONETIZATION OF GOLD

If these things can be said by level-headed economists, whatever can be adduced on the other side, it is no matter for surprise that some thinkers have advocated the "demonetization" of gold. Among the most prominent of them is Mr. J. M. Keynes, who proposes that the legal convertibility of currency into gold having been abolished the authorities should adopt as the aim of central banking and currency policy the maintenance of the price of a standard composite commodity at an approximately constant level. They would be guided by other factors as well as by actual price movements, but "the main point is that the *objective* of the authorities . . . should be stability of prices." Gold reserves would still be maintained but their state would not be allowed to influence monetary policy directly, and the official buying and selling prices for gold would be varied from time to time, just as the bank rate is now varied. The gold would serve "as a war-chest against emergencies and as a means of rapidly correcting the influence of a temporarily adverse balance of international payments and thus maintaining a day-to-day stability of the sterling-dollar exchange." [18]

Mr. Keynes' own statement of his plan is as follows:

> Whilst it would not be advisable to postpone action until it was called for by an actual movement of prices, it would promote confidence and further an objective standard of value, if, an official index number having been compiled of such a character as to register the price of a standard composite commodity, the authorities were to adopt this composite commodity as the standard of value in the sense that they would employ all their resources to prevent a movement of its price by more than a certain percentage in either direction away from the normal. . . . Actual price movements must of course provide the most important datum; but the state of employment, the volume of production, the effective demand for credit as felt by the banks, the rate of interest on investments of various types, the volume of new issues, the flow of cash into circulation, the statistics of foreign trade and the level of the exchanges must all be taken into account. The main point is that the *objective* of the authorities, pursued with such means as are at their command, should be the stability of prices. . . . It is the great advantage of

gold standard that it overcomes the excessive sensitiveness of the exchanges to temporary influences. Our object must be to secure this advantage, if we can, without committing ourselves to follow big movements in the value of gold itself. I believe we can go a long way in this direction if the Bank of England will take over the duty of regulating the price of gold, just as it already regulates the rate of discount. The Bank of England should have a buying and a selling price for gold, and this price might remain unchanged for considerable periods, just as the bank rate does. But it would not be fixed or "pegged" once and for all, any more than the bank rate is fixed. . . .

If we agree that gold is not to be employed in circulation, and that it is better to employ some other criterion than the ratio of gold reserves to note issue in deciding to raise or lower the bank rate, it follows that the only employment for gold (nevertheless important) is as a store of value to be held as a war-chest against emergencies and as a means of rapidly correcting the influence of a temporarily adverse balance of international payments and thus maintaining a day-to-day stability of the sterling-dollar exchange. . . . Therefore I make the proposal—which may seem, but should not be shocking—of separating entirely the gold reserve from the note issue.[19]

Years before the war, Professor Wicksell, the Swedish economist, asserted, rather less disingenuously, that once gold were abandoned as a monetary standard, stability could be achieved by "a proper manipulation of general bank rates, lowering them when prices are getting low, and raising them when prices are getting high."[20] On behalf of schemes of this sort we may quote a practical banker, Mr. Reginald McKenna, chairman of the Midland Bank:

I have endeavored to explain the meaning of a managed currency and the method of maintaining its value by regulating the quantity of money through the control of credit, and I have shown that during the last three years a managed currency has been kept more stable than one based on gold. We can supplement this favorable view by the further observation that considerable economy is effected by its use, as there is no need to incur the cost involved in buying and holding gold as a reserve.[21]

Some economists have gone even further than Mr. Keynes in his substitution of general prices for gold prices as a criterion of discount policy, and have proposed the actual replacement of gold by

picked commodities in the monetary system. Professor Lewis proposes that each unit of currency should at all times be convertible into four warrants, entitling the possessor to receive respectively *a* pounds of wheat, *b* pounds of cotton, *c* pounds of iron, and *d* pounds of silver, and realizable through the agency of a special bank.[22] There would thus be room for variation in the relative value of the warrants but not in their total value. A writer in the *American Economic Review* has gone so far as to propose the actual accumulation of reserves of non-perishable commodities to be exchanged against currency in precisely the same way as gold is exchanged at present.[23]

On the other hand there are those who reject the tying up of money with any material commodity or even with a formula. Stability of prices, it is argued, can only be achieved by directly proportioning the volume of currency and credit to the commercial transactions which it has to perform. Mr. Taylor Peddie proposes the divorce of money from gold and the regulation of credit by careful scrutiny of the purpose for which each loan is required. Commercial bills of exchange would then constitute the basis of the quantity of money, while "the bank of England would classify all Bills of Exchange into grades A, B, C, and D, etc., and it should be a rule that the more speculative credits should not exceed a fixed ratio to Class A, which would be producers' credits secured on real products." [24]

Since the course of prices under the gold standard cannot be accurately predicted, and is at least in part dependent on quite fortuitous circumstances, those who desire occasional "gentle inflation" would by implication accept at times the abandonment of gold and should be grouped with the advocates of that policy. Mr. D. H. Robertson takes the line that since, economically, we are in the hands of the business man, whose activity is stimulated by a fall in the value of money, gentle "inflation" might be our best policy. There are, indeed, many who fear that by stabilizing prices we may only stabilize production. He concludes:

On the whole, then, if we were perfectly free to choose, we should perhaps stick fairly closely to the obvious decision to keep the price level stable. But we should free ourselves to interpret that decision with care; we should be prepared either to suspend it, or to compel the overhauling of money contracts, in exceptional circumstances; and so long at any rate as we preserve the system variously known as Private Enterprise and as Wage Slavery, we should not refuse to wink at a little judicious use of the money pump, if the tires of industry seem to be sagging unduly.[25]

Deflation is too painful a course to be advocated as a permanent policy. As a temporary expedient rendered necessary by the circumstances of the time it has had many eminent friends. Thus Professor Kemmerer wrote in 1920:

Deflation is a painful economic process. By raising the value of the monetary unit in which debts are expressed it places unjust burdens upon many debtors to the advantage of creditors. It depresses business, and tends to reduce the demand for labor thereby increasing unemployment, forcing down wages, and causing labor troubles. Despite these evils, world deflation is absolutely necessary, although less deflation is needed in the United States than in most advanced countries. The existing gold base is altogether inadequate safely to support the present paper money and deposit currency at a parity with existing gold monetary units in a free gold market. Furthermore, inflation's work has not yet been completed, and therefore some of the otherwise evil results of our inflation experience could still be avoided or mitigated by deflation.[26]

THE CASE FOR GOLD

Supporters of a currency system divorced from gold would reply that this passage, by exposing the painful necessities to which we are subjected by reliance for the protection of our currency on hoards of precious metals, condemns the policy of the gold standard. But there are cogent reasons for its retention. Those which economists are chiefly wont to bring are disparagement of the power of banks and governments to achieve price stability by "management" of the currency, and distrust of their willingness to do so if it were

contrary to their immediate benefit. "Experience has shown," wrote Professor Gregory apropos of the return of Great Britain to a gold standard, "that the control of currency is liable to the gravest possible abuses, and that it is undesirable that the discretionary authority of the managers of non-metallic standards should be allowed to continue. . . . Within a single decade, the value of paper money has fluctuated sufficiently to ruin whole social classes. Nothing of this sort is to be feared from gold. The gold standard, in addition to imparting comparative stability to the price level over time, necessarily involves stability in prices over the whole of the area in which the gold standard prevails." [27] Lehfeldt is not alone in pointing out that we may have to choose between constancy of internal prices and steadiness of exchange with foreign countries.[28] In fact, there is foundation for the statement that where monetary theorists are mainly pre-occupied with the foreign exchange functions of money there the gold standard finds the greatest favor; where the internal price level, and the business cycle, are the matters of chief concern there gold is most distrusted. In this way more than in any other are the conditions of the various countries reflected in the works of their monetary theorists. It is not surprising, for instance, to find the Frenchman, M. Nogaro, writing:

> A return to convertibility and to the free export and import of gold constitutes in the present state of monetary technique the only method of restoring the gold points and therefore of re-instituting a system of stable exchange with countries on a gold basis.[29]

The concreteness and familiarity of gold are in its favor. "So long as nine people out of ten in every country think the gold standard the best, it is the best." [30] Currency systems embodying the principle of convertibility, however unlike the systems with which we are familiar, are at least nearer practical politics in peace time and in great financial countries than proposals for the total divorce of currency from the precious metals. Such schemes may be divided into those which seek to control the fluctuations in the value of the me

itself, and those which seek to neutralize their effect on the value of money. Among the latter, a scheme, the same in principle as that formulated years ago by Professor Irving Fisher, for what is called a tabular standard, has actually been debated in Congress in the shape of Mr. Goldsborough's Bill of 1922.[31] The following is Professor Fisher's summary of his own plan:

(1) To abolish gold coins and to convert our present gold certificates into "gold bullion dollar certificates" entitling the holder, on any date, to dollars of *gold bullion* of such weight as may be officially declared to constitute a dollar for that date.

(2) To retain the "free coinage," *i.e.*, to be more exact, the unrestricted *deposit* of gold, and to retain also the unrestricted *redemption* of gold bullion dollar certificates.

(3) To designate an ideal composite or "goods-dollar," consisting of a representative assortment of commodities, worth, at the outset, a gold dollar of the present weight, and to establish an "index number" for recording, at stated times, the market price of this ideal goods-dollar in terms of the gold bullion dollar.

(4) To adjust the weight of the dollar (*i.e.*, the gold bullion dollar) at stated intervals, each adjustment to be proportioned to the recorded deviation of the index number from par.

(5) To impose a small "brassage" fee for the deposit of gold bullion and provide that no one change in the bullion dollar's weight shall exceed that fee.

In addition to these features of the plan itself should be mentioned the tacit assumption that we retain a sound banking system. Without such, the effectiveness of the stabilization plan would be quite lost.[32]

The Goldsborough Bill, which embodied the main features of his plan, provided also for the division of existing gold reserves into two parts, one to act as a reserve against the new gold bullion dollar certificates and to be equal in value to one-half of such certificates outstanding, and the other to be handed to the Treasury as profits and therefore presumably to be realized on the open market. It is not clear whether this rigid reserve requirement could be combined in practice with the duty to maintain the dollar's purchasing power at a constant level by varying its gold content, without mag-

nifying the jolt ensuing on a change in the purchasing power of gold, since if for instance that change were a fall, the dollar ratio would be increased and the reserves thereby depreciated in value, as well as in amount by the greater attractiveness of withdrawing gold necessitating a doubly violent reduction of the circulation.

At first sight the Fisher plan—of which many variations have been put forward and even practised [33]—appears to be the same as that expounded by Mr. Keynes, but in fact the chain of cause and consequence is reversed. In the Keynes plan the credit policy of the banks (and therewith the control of the note issue) is *consciously* directed towards maintaining a stable price level, quite apart from the state of the reserves. The alteration of the gold content of the pound is made not directly in relation to the price level but in relation to the exchanges. The currency is not backed by gold in the ordinary sense, since there is no legal obligation to convert and the gold stocks do not play the part of a currency reserve. In Fisher's plan the dollar remains a gold certificate and sufficient reserves have always to be maintained to preserve convertibility, the credit policy of the Federal Reserve Banks being directed to the upkeep of the reserves exactly as at present; it is in the first place the gold ratio of the dollar, and only indirectly the official discount rate, which varies with fluctuations in the purchasing power of money. The variation, moreover, is automatic and not discretionary. According to Professor Fisher, "the only constructive criticism" of his plan which he had seen in ten years was made by Professor Rogers, who, although in general a supporter of the Goldsborough Bill, allowed that it offered serious possibilities of international speculation in gold whenever a radical change in the price level was taking place.[34]

The more general criticism, as expressed by Professor Taussig, is that "the evils of the present system are not so great as to call for the extraordinary remedy proposed." *

* Professor Taussig continues: "The world has long been familiar with the instability of the specie standard of prices. We all know that it is far from perfect. It is defended not as an ideal system, but as the best working expedient yet found. It is rooted in

Professor Fisher claims for his plan that it would not only nullify he effect of long-period alterations in the value of gold on the course f prices but would at the same time assure short-term stability in he price level. Plans which concentrate on control of the long- eriod movement have to be reënforced with other suggestions for he short-period problem. Thus the groups of methods for stabiliza- ion which we outlined at the beginning of this chapter merge into ne another and it will be impossible to adhere to the classification ny further. Professor Lehfeldt has been the chief and consistent xponent of plans for the international control of gold output, in rder to stabilize prices.

The output would have to be placed under the control of some authority hat could take long views, and act in the interest of the world, instead of hat of the shareholders in the mines. There is nothing impossible in such proposal in these days of trusts; only the controlling body would have be representative of governments, whereas the ordinary trust is based on rivate gain.[35]

The general attitude of the post-war generation is probably that expressed by Mr. D. H. Robertson. "Gold is a fetish, but it does the trick. . . . If we decide to acquiesce silently for the present in the maintenance of a gold standard by the world, and in the adhesion to that standard of our own country, may we not at least hope that the monetary authorities of the world will do their best, by collective action, to prevent the misbehavior of gold?" [36]

Carl Snyder, the statistician of the New York Federal Reserve ank, has a plan which, like Professor Fisher's, requires the abolition

ibits and traditions of mankind, as well as in the physical qualities of the precious etals. . . . On the whole, I conclude that this proposal for radical change gives better portunity for ingenious intellectual exercise than for practical efficacy." "The Plan for a mpensated Dollar." *Quarterly Journal of Economics*, May, 1913, p. 416.

of gold currency while maintaining the convertibility of paper into gold bullion. No gold reserve requirements would be imposed on the Federal Reserve System, whose reserves would henceforth consist of convertible paper, the gold being concentrated as a note redemption fund. The issue of currency would be controlled according to a statutory schedule by variations in the discount rate or "open market" operations (*i.e.*, the buying or selling of acceptances or securities by the banks), so as to maintain its purchasing power constant. The long-period fluctuations in the purchasing power of gold are to be eliminated by rigid supervision of the export and import of gold and currency and by countervailing action on the open market.[37]

THE DOMINANT DOLLAR

It is obvious that such a scheme could not prevent fluctuations in the price level due to large or sustained changes in the value of gold and that it would only be possible at all for any length of time in a country rich enough and with gold reserves large enough to undergo considerable losses or accretions of gold without panic or inflation—in fact, in the United States alone, where comparative stability has undoubtedly been achieved within the limits of the gold standard by the conscious policy of the Federal Reserve authorities. Economists in monetarily less fortunate countries have laid stress on the overwhelming influence possessed by the dollar over the monetary position in the rest of the world, wherever money is directly or indirectly kept in constant relationship to gold, and have therefore insisted on the need for international action to stabilize prices. Mr. McKenna is among those who believe that already the price level in the United States is determined not by the free value of gold but by the deliberate policy of the Reserve Board, in fact "that it is not the value of gold in America which determines the value of the dollar, but the value of the dollar which determines the value of gold." He goes on:

The mechanism by which the dollar governs the external value of gold is obvious. If the price level outside America should rise in consequence of an increase in the supply of gold, America would absorb the surplus gold; if, on the other hand, the external price level should fall in consequence of a shortage of gold, America would supply the deficiency. The movement of gold would continue until the price levels inside and outside America were brought once more into equilibrium. Although gold is still the nominal basis of most currencies, the real determinant of movements in the general world level of prices is thus the purchasing power of the dollar. The conclusion therefore is forced upon us that in a very real sense the world is on a dollar standard.[38]

That is a situation which the world has to accept, and Mr. Bellerby has put forward a scheme for stabilizing it and regularizing it on the basis of a loose form of international coöperation.

1. The level of prices or the purchasing power of gold on a selected date should be recognized as normal.

2. The index officially selected for the measurement of the level of prices should initially be an American index.

3. The method of regulating credit in the United States should continue unmodified except in one respect. Whilst directing its policy towards trade stability in accordance with its existing methods, the Federal Reserve System should have regard to the necessity for restraining the price level within reasonable range of the recognized "normal." The limits of fluctuation from the normal would be undefined, and would be at the discretion of the Federal Reserve System.

4. The Central Banks of European and other countries should support with their own discount policies the policy of the United States, in so far as their own national situations might permit.

5. An International Conference of Central Banks should be convened for the purpose of establishing and assisting the operation of the foregoing principles. . . .

6. A permanent international monetary relations commission might be established. . . .

For the United States alone—though it is, perhaps, doubtful whether one country can be so isolated even now—many economists believe that there is no need to look farther than the policy of the

Federal Reserve authorities for the stabilization of prices. Professor Commons writes:

No economist has ever held that the general level of prices can be exactly stabilized. There will always be fluctuations of the general level up and down, even with the most perfect stabilization of prices. What is really meant by stabilization of prices is in fact merely the stabilization of "the general credit situation," so as to avoid only the excessive peaks and excessive slumps of the general price level. And this, we may say, has been the effect of the policy of the Federal Reserve Board and banks since the adopting of the resolution of April, 1923.* . . . The open-market operations are a more efficient and smooth working device than the discount rate, because they make it possible for the reserve system to take the initiative and not to wait on the member banks in order to furnish or withhold the supply of funds on the market.†

But the dangers of a situation dominated by a single financial power are obvious. In the pre-war monetary world, any one country on a gold standard found in the remaining such countries a very heavy flywheel on its monetary machine, so that violent aberrations were rapidly smoothed out. Now the United States are themselves the flywheel on the world's monetary machine, and if the time came when the Federal Reserve authorities lost control of the general

* The resolution read: "That the time, manner, character and volume of open-market investments purchased by Federal Reserve banks be governed with primary regard to the accommodation of commerce and business and to the effect of such purchases on the general credit situation."

† J. R. Commons, "The Stabilization of Prices and Business," *American Economic Review*, March, 1925:

The efficacy of open market operations in controlling the supply of money has been recently explained by Mr. McKenna thus: Stated in the briefest terms the proposition is that every central bank purchase and every loan by a central bank increases the cash resources of the other banks and provides the basis for an expansion in the volume of credit, or, in other words, of money; while every sale by a central bank or repayment of a central bank loan reduces bank cash and restricts the supply of money. This proposition holds true whatever the central bank may purchase, whether it buys or disposes of gold, bills, securities or any other asset. From this it follows that central banks possess the power to regulate the supply of money irrespective of gold movements. "Post-War Banking Policy," p. 141. The action of a central bank in thus counteracting a gold movement is commonly called neutralizing.

credit situation, or when the people of the United States could no longer trust those authorities to pursue a sound monetary policy, they could look for no protection from the rest of the world. Meanwhile the other gold standard countries are almost completely dependent, as far as monetary affairs are concerned, on conditions in the United States. A clear illustration of this occurred recently, when high short money rates on Wall Street resulted in a capital movement between London and New York much greater than was justified by the actual flow of commodities. The result was that the sterling-dollar exchange went below the point at which it is profitable to export gold, and the Bank of England saw its reserves being so rapidly depleted that the Bank Rate had to be raised, forcing the whole credit system in Great Britain to reflect not British but American conditions.

INTERNATIONAL COÖPERATION

Many economists have pointed out the need for concerted action to prevent foreign exchange aberrations from upsetting the equilibrium of this one-sided structure. Soon after the war, when violent movements of the exchange were proving a terrible hindrance to trade, a scheme was sponsored by Mr. Ter Meulen for the creation of an international credit bank for foreign trade, but the plan never came within range of practicability. One very common suggestion is the concentration and economy of the gold reserves of the world in exactly the same way as the gold reserves of a single country are concentrated and economized by means of central banks. International payments by means of metallic gold are held to be as wasteful and out of date as the carrying of boxes of bullion between the banks of a city to liquidate their day-to-day indebtedness. A plan for concerted gold exchange standard has been put forward by Mr. Hawtrey.

Whatever system is adopted must be the subject of international agreement. The basis of this international agreement will be the establishment by

each of the participating States of a currency law calculated to allow so much uncovered paper money as, with the portion covered by gold, will just provide for its needs, with a suitable margin left over. This margin or reserve (like the banking reserve of the Bank of England) is necessary to allow of the inevitable casual and seasonal variations. The supply of currency of each country must be, as nearly as may be, such that all the foreign exchanges are at or near their new gold parities. Once this state of equilibrium has been attained it must be preserved by the gold exchange standard. . . . Any one with legal tender money in one country should be able to surrender it in exchange for an equivalent amount of legal tender money in any other country, the amount so surrendered being withdrawn from circulation. . . . Any country which indulged in inflation, or allowed its currency unit to depreciate, would find more and more of its paper money locked up in the exchange reserves and withdrawn from circulation. This would operate like the export of gold.

Mr. Hawtrey then proposes that in order to accelerate the connection (via credit) between money and prices an index number of prices should be used in the administrative control of currency and adds:

In practice the effectiveness of an international system would not absolutely depend on its universality. . . . An Anglo-American combination would command so large a proportion of the world's stock of gold that it would be almost sufficient by itself.[39]

—an opinion in which he is strongly supported by Professor Cassel.[40]

An international concentration of gold reserves in the great gold centers New York and London, obviously requires a coöperation between all gold standard countries and particularly between England and the United States. The aim of this coöperation should be to enforce such economy in the monetary use of gold as is necessary in order to maintain gold at an invariable value. This stabilization of the value of gold is of fundamental importance for the well-being of the whole world.[41]

The policy of the gold exchange standard by international agreement was supported in the well-known resolutions of the Gen-

Conference. One of the provisions of the proposed agreement was to be this:

> Credit will be regulated not only with a view of maintaining the currencies at par with one another, but also with a view of preventing undue fluctuations in the purchasing power of gold. It is not contemplated, however, that the discretion of the central banks should be fettered by any definite rules framed for this purpose.

The Conference further recommended:

> With a view to the development of the practice of continuous coöperation among central banks and banks regulating credit policy in the several countries . . . that the Bank of England be requested to call a meeting of such banks as soon as possible to consider the proposals adopted by the Conference and to make recommendations to their respective Governments for the adoption of an international monetary convention.

That meeting has never been called; belief in the efficacy of international conferences has probably waned since 1922.

CAN IT BE DONE?

There is a tacit assumption running through all these plans, that the banks are able to control the level of prices through discount and open market policy. The statement of this assumption was never more forcible than in the Amendment to the Federal Reserve Act proposed in 1926 by Representative Strong, which sought to delete the final two words from this paragraph of the Act:

> Para. (d). Section 14. To establish from time to time, subject to review and determination of the Federal Reserve Board, a minimum rate of discount to be charged by such bank for each class of paper, which shall be made with a view to accommodating commerce (*and business*).

and to add instead: "and promoting a stable price level for commodities in general."[42] All the powers of the Federal Reserve System

were to be used for promoting stability in the price level. If we agree with Mr. Hawtrey that currency is essentially dependent on credit, we would naturally accept price control through credit policy, as a fact, the causal sequence being "cheaper credit—more credit—more money—higher prices." But some hold the contrary view. Professor Cannan, basing his arguments on the assertion that a bank cannot lend more money than it possesses (the cloak-room analogy) and therefore cannot expend effective credit beyond the limits set by the currency, writes,

> The remedy for excessive use of currency is not to be found in regulation of the rate of interest charged by and paid by certain intermediaries (the banks) between lenders and borrowers, but in regulation of the issue of currency.[43]

This inverts the sequence into: "more money—higher prices—more credit."

Professor Wicksell contended that the crux of the matter was the relationship between the interest which had to be paid on loans and the rate of profit which, over the whole field of commerce and industry, it was possible to earn on them.

> When interest is low in proportion to the existing rate of profit, and if, I take it, *the prices thereby rise,* then, of course, trade will require more sovereigns and bank notes, and therefore the sums lent will *not* all come back to the bank, but part of them will remain in the boxes and purses of the public; in consequence, the bank reserves will melt away while the amount of their liabilities very likely has increased, which will force them to raise their rate of interest.[44]

The sequence is thus "Low interest—big profits—rising prices—more money." Helfferich attempted to combine such conflicting views by asserting that discount rates are reciprocally influenced by and responsible for changes in prices and turnover, and that whichever way the causal sequence went the initiating fact would be modified and compensated.[45] The orthodox view is probably that stated in the following terms of Professor Cassel:

As a discount policy is actually capable of regulating the value of the monetary unit in the case of the gold standard so as to maintain its level with gold, it is an inevitable conclusion that a right discount policy must also be capable of regulating the value of a free paper standard.[46]

THE QUANTITY THEORY

There are, however, those who refuse to believe that even if the quantity of money and credit is regulated, the price-level can thereby be stabilized. Thus whereas Fisher and his school believe that changes on the money side are all-important in determining the general level of prices, Dr. Helfferich and many others believe that in normal circumstances commodity movements have by far the greater significance. Such plans as Fisher's, Keynes's, Snyder's, Hawtrey's, Cassel's, Wicksell's—all rest more or less explicitly on the Quantity Theory of Money (which may be roughly stated as "other things remaining constant the level of prices varies directly with the volume of the means of exchange" *)—a theory which has been called in question of late, not so much on the ground of its inherent illogicality as on the argument that other things neither will nor can remain constant. Mr. Lawrence's comprehensive survey of the difficulties of basing a plan for stabilization on a rigid acceptance of the quantity theory of money may be summarized in four propositions:

1. The "equation of exchange" connects a number of factors which *in combination* go to determine prices, including the rapidity with which they circulate, none of which can be picked as especially a *cause* of changes in the others.

2. Bank credit is undoubtedly important but it cannot be precisely controlled, and the *velocities* of circulation of money and credit cannot be deliberately controlled at all, reflecting as they do the operation of human factors in economics.

3. It is impossible to tell *before the actual event* when or in what degree

* This definition assumes that velocity of circulation is included in the condition "other things remaining constant."

changes should be made in any one factor (*e.g.*, the volume of credit) in order to neutralize the effects of changes in some other (*e.g.*, the volume of trade and production).

4. The price level itself may sometimes be the cause of changes in the other factors instead of an effect.[47]

Other theorists have gone so far as to insist that not stability in the quantity of money (as related to the volume of goods) but stability in its price—that is, the rate of interest—is the clue to beneficent monetary policy, and the proposition expressed by Mr. J. A. Hobson, that

> The so-called purchase-price of money is not a true price at all, that the commonly adopted economic view, to the effect that money is bought and sold and passes in exchange on equal terms with ordinary commodities is erroneous; it is always the hire-price of money that really counts on a parity with other prices.[48]

has become the intellectual foundation of the structure of belief described as the "interest standard of currency," which reverses all the cherished ideas of bankers and theorists regarding the effect of rising money rates in discouraging borrowing and reducing the volume of circulation, and *vice versa*, and concludes

> All the stability that the world of business has so far enjoyed and is capable of is the gift of the natural stability of interest.[49]

THE CONSUMERS' CREDIT IDEA

With this may be compared, in its despite of the quantity theory, the group of ideas of which the nucleus is the Credit Scheme of Major Douglas, and which has been summed up by one of his disciples in two propositions:

> 1. The Price of Goods to the Consumer should represent only the Real Benefit received by him as an individual, and should include nothing to cover the increased real credit accruing to the community in general.

2. The Balance now controlled by financial credit issued from the money market should be covered by drawing on the financial credit of the Community as a whole,—that is, from the Treasury.[50]

The points aimed at are stated to be Price Regulation, Credit Control on behalf of the Consumer, and National Dividends. Readers may be inclined to regard this as verbal mysticism. Nevertheless there is much to be said for emphasizing the direction and use of credit rather than its volume only. In this way instalment credit enters into monetary theory, though rather as a complication than a cure. Mr. J. A. Hobson, whose theory of "over-saving" is well known, judges credit policy by the extent to which it readjusts the bias in favor of spending for consumption.

In fine, the ultimate effect of credit, regarded as a means of stimulating trade and employment, will depend upon its influence upon the distribution of the general income. It will be favorable according as it increases the proportion of the general income passing to the wage-earners or to public bodies to be spent in demand for commodities or the financing of non-industrial services.[51]

Messrs. Foster and Catchings, summing up their analysis of economic life under the profit system, write:

Theoretically, then, it is always possible to add to the volume of money in circulation in such a way as to benefit the community. The only question is how new money is used in the first instance. Theoretically, both the volume of money and the volume of goods can be increased indefinitely, without change in the price level, if the increase on the consumption side is rightly proportioned and rightly timed to the increase on the production side. An accurate retail price index would itself measure the success or failure of industry to maintain this right proportion. . . . Unfortunately, as we have seen, the volume of money is now increased in the ordinary course of business in such a way as to overthrow this balance. For fluctuations in the volume of money are now determined by the independent act of thousands of bankers and thousands of bank borrowers. . . . Each is quite properly concerned with the needs of his own business, rather than with the general and far-away problem of maintaining the annual equation.

Society, therefore, must devise methods for controlling the volume o money in its economic interests. The question at issue is not whether it i best to have a "managed currency," since every currency is necessarily "managed currency." The sole question is whether currency shall be mar aged intelligently.[52]

THE REFORM OF BANKING METHODS

It is therefore natural that attention should have been increasingl drawn to the reform of banking methods and systems, alongsid changes in the legal structure of currency and credit, as a parti remedy for price instability or as a preliminary to deeper remedie There are, in point of detail, almost as many central banking sy tems as there are countries in the world, but most of the issues a illustrated in a comparison between the English banking structu and the Federal Reserve System. The Bank of England almo certainly has, in fact if not in law, greater power over the curren and credit of Great Britain than the Federal Reserve Board or t Federal Reserve Banks have over the currency and credit of t United States, because, according to Mr. Lawrence:

> The incomparable advantages of the Bank of England in the prestige crystallized tradition, freedom from political snipeshooting, relief from t burdens of defense, the support of government deposits, the exclusive poss sion of bank reserves, the concentration of banking power, the size of country, the density of population and its state of economic progress, and fin the identity of interest of the great bank and the commercial and financ community which it serves, afford the most favorable auspices under wh a central bank might embark on a policy of credit and price control.[53]

He concludes that the greater the freedom of the Federal Rese System from interference and the more it develops a tradition leadership, the more effectively will the powers which the law stows on it be exercised in the effort to produce stability.

The want of a stable hierarchy of discount rates on various cla

f paper under the Federal Reserve System has been deplored as a actor militating against any organized control of the total volume f cash and credit.[54] Part of the difficulty is caused by the New York tock Exchange, in which business is carried on in cash or day-to-day ransactions (as contrasted with the credit system in operation in ondon). The resultant dealing in cash margins with an immense uperstructure of bank credit greatly exaggerates the importance f call-money in the credit system, the whole of which is sub- ected to strains proportionate to the fluctuations of bull and bear ovements in Wall Street, a fact which naturally makes organiza- on of credit for the purpose of stabilizing prices a difficult problem. n the other hand, the Bank of England is subject to no form of ublic or democratic control, and has no legal power over any ther bank. These illustrations—and they are no more—help to ow, as this summary of current views on monetary reform has own, that if we are to make prices our servants and not our mas- rs investigation must proceed in more than one direction—into e legal basis of currency, into the nature and volume of credit, nd into the financial structure by which the credit is distributed nd the currency handled.

No attempt has been made in this chapter to weigh up all the vidence for and against the various plans reviewed. That would e in itself a task for a large book. Yet some general facts emerge om the conflict of opinion. There is, to begin with, very wide- pread dissatisfaction with the present system, whose want of flexi- ility is deplored alike by those who wish to make monetary con- itions a corrective rather than a cause of business fluctuation, and y those who urge the creeping evils of long-term changes in the alue of gold. Even the economists who accept the gold standard *ute de mieux* demand some international measure of control or oncerted policy such as would relieve us of our present hazardous ependence on circumstances beyond the influence of our credit and urrency authorities. The possibility of war in any part of the world

enlarges the risks which we are running. One thing at least, then the survey has proved, that there is a monetary problem, and tha the task of its solution deserves the efforts of our wisest economist and boldest statesmen.

A SHORT BIBLIOGRAPHY

ECKHART, B. H. "The Discount Policy of the Federal Reserve System." New York, Henry Holt & Co., 1924.

ELLERBY, J. R. "Monetary Stability." London, Macmillan & Co., 1925.

ANNAN, EDWIN. "The Paper Pound of 1797-1821." A reprint of the Bullion Report. With an introduction. London, P. S. King & Son, 1919.

——, "Money. Its Connection with Rising and Falling Prices." London, P. S. King, 1926.

——, "An Economist's Protest." London, P. S. King & Son, 1927.

ASSEL, GUSTAV. "The World's Monetary Problems." Two memoranda written for the League of Nations. London, Constable & Co., 1921.

——, "Money and Foreign Exchange after 1914." New York, the Macmillan Co., 1922.

——, "The Restoration of the Gold Standard." *Economica* (Journal of the London School of Economics). November, 1923.

——, "The Rate of Interest, the Bank Rate, and the Stabilization of Prices." *Quarterly Journal of Economics,* August, 1928.

——, "Post-War Monetary Stabilization." New York, Columbia University Press, 1928.

OMMONS, J. R. "The Stabilization of Prices and Business." *American Economic Review.* March, 1925.

ICK, ERNST. "The Interest Standard of Currency." New York, Houghton Mifflin Co., 1926.

OUGLAS, MAJOR. "Economic Democracy."

SHER, IRVING. "Stabilizing the Dollar." New York, the Macmillan Co., 1920.

——, "The Purchasing Power of Money." New York, the Macmillan Co., 1925.

——, "Our Unstable Dollar and the So-called Business Cycle." *Journal of the American Statistical Association.* June, 1925.

——, "The Money Illusion." New York, the Adelphi Co., 1928.

STER, WILLIAM, and CATCHINGS, WADDILL. "Business Conditions and Currency Control," *Harvard Business Review,* April, 1924.

——, "Profits." New York, Houghton Mifflin Co., 1925.

GREGORY, T. E., "The Return to Gold." London, Ernest Benn & Son., 1925
HAWTREY, R. G. "Monetary Reconstruction." London, Longmans, Green & Co., 1923.
———, "Currency and Credit." London, Longmans, Green & Co., 1928.
HELFFERICH, KARL. "Money." Translated from the German by Louis Infield. London, Ernest Benn & Son, 1927.
HOBSON, J. A. "Gold Prices and Wages." London, Methuen & Co., 1913
———, "The Economics of Unemployment." London, Allen & Unwin, 1922
———, "The Industrial System." London, P. S. King & Son. Revised edition, 1927.
KEMMERER, E. W. "Money and Credit Instruments in their Relation to General Prices." New York, Henry Holt & Co. Second Edition, 1909
———, "High Prices and Deflation." Princeton University Press, 1920.
KEYNES, J. M. "Monetary Reform." New York, Harcourt Brace & Co., 1924
———, "The Economic Consequence of Mr. Churchill." London, Leonard & Virginia Woolf, 1925.
KNAPP, GEORG F. "The State Theory of Money." Translated by H. M. Lucas and J. Bonar. London, Macmillan & Co., 1924.
LAYTON, W. T. "An Introduction to the Study of Prices." The Macmillan Co.
LAWRENCE, J. S. "Stabilization of Prices." New York, The Macmillan Co. 1928.
LEHFELDT, R. A. "The Restoration of the World's Currencies." London P. S. King & Son, 1923.
———, "Controlling the Output of Gold." London, London General Press 1926.
———, "Money." London, Oxford University Press, 1926.
LEWIS, G. M. "A Plan for Stabilizing Prices." *Economic Journal,* March 1925.
MCKENNA, REGINALD. "Post-War Banking Policy." London, William Heinemann, 1928.
MLYNARSKI, FELIX. "Gold and Central Banks." New York, The Macmillan Co., 1929.
NOGARO, BERTRAND. "Modern Monetary Systems." London, P. S. King & Son, 1927.
PIGOU, A. C. "Industrial Fluctuations." London, Macmillan & Co., 19
ROBERTSON, D. H. "Banking Policy and the Price Level." London, P. S. King & Son, 1926.
———, "Money." Cambridge (England) University Press. Revised edition 1928.

NYDER, CARL. "Influence of Interest Rate on the Business Cycle." *American Economic Review,* December, 1925.

——, "The Stabilization of Gold: A Plan." *American Economic Review,* June, 1923.

'AUSSIG, F. W. "The Plan for a Compensated Dollar." *Quarterly Journal of Economics,* May, 1913.

/ICKSELL, KNUT. "The Influence of the Rate of Interest on Prices." *Economic Journal,* June, 1907.

OUNGMAN, ANNA. "The Efficacy of Changes in the Discount Rates of the Federal Reserve Banks." *American Economic Review,* September, 1921.

OFFICIAL DOCUMENTS

eport of the (Cunliffe) Committee on Currency and Foreign Exchanges after the War, Cmd. 464, 1919.

eport of the Royal Commission on Indian Currency and Finance, Cmd. 2687, 1926.

ocuments of the Genoa and Brussels Conferences. (Published for the League of Nations.)

. S. House of Representatives. Committee on Banking and Currency. Hearings on: Goldsborough Bill, H.R. 11788, 1923; Goldsborough Bill Revised, H.R. 494, 1925; Strong Amendment, H.R. 7895, 1927.

NOTES TO CHAPTERS

CHAPTER I

1. *The London Spectator*, November 23, 1928.
2. "History of England," 1848, Chapter XXI.
3. "Principles of Political Economy," Book II, Chapter XIII, Part I.
4. London, 1923; p. 21.
5. New York, 1923; p. 52-53.
6. *American Economic Review*, June, 1923.
7. *Colliers' Weekly*, 1923.

CHAPTER II

1. "Money," by W. T. Foster and W. Catchings, New York, 1927; pp. 3, 4, 5, 6.
2. "We know that there were countries far advanced in civilization which had no ins. There were none in Egypt, in Assyria, in Babylonia, in the old Phœnician colonies; coins are sure to be lost now and then, and are exceedingly indestructible. None have en found in the ruins of these countries, and yet it appears, from recent research, that bylonia had an elaborate system of banking, and all the machinery of transferring lances from one account to another." And again: "Babylonian bankers employed truments of commerce which were, to all intents and purposes, substituted currencies. e private orations of the great Greek pleaders are full of information as to the existence bankers in the Greek cities, and of the circulation of bills of exchange between such nkers as were in correspondence with each other, and had understandings, as to the gotiations of such instruments." "The Economic Interpretation of History," by Thorold gers, London, 1888; pp. 184, 206.
3. "Western Civilization in its Economic Aspects," by W. Cunningham, London, 1924; l. 2, p. 38.
4. Ibid., vol. 2, p. 51.
5. Ibid., vol. 2, p. 54.
6. "Money and Civilization," by Alexander Del Mar, London, 1886; p. 5.
7. "His. Exchequer," Madox, I, 272-3, where numerous instances of these transactions given, relating chiefly to the reigns of Stephen, Henry II, John, and Henry III.
8. "His. Britain," Henry, IV, 243.
9. "Money and Monetary Policy in Early Times," by A. R. Burns, London, 1927; p. 335.
10. "Outline of History," H. G. Wells, London, 1920; p. 297.
11. "Money and Monetary Policy in Early Times," by A. R. Burns, London, 1927; 1927.
12. "Outline of History," H. G. Wells, London, 1920; p. 297.
13. Ibid., p. 297.
14. "Outline of History," H. G. Wells, p. 97. The author touching upon the fashion which the money economy is indispensable to any real freedom of individual action

of movement, adds: "When one realizes the absence of small money or of any conven iently portable means of exchange in the pre-Alexandrian world, one perceives hov impossible was private travel in those days."

15. Some writers have insisted that though Egypt knew no coins they must have use commonly other things which took their place—pottery, wood, leather, glass, papyru porcelain. Del Mar in his "Money and Civilization" makes these contentions. But th consensus of opinion and the weight of evidence favors the conclusion indicated here: tha while money transactions took place, a defined weight of metal serving as money, mone transactions did not enter into the daily life of the people. It was Greece that democratize money and made it a tool used by the people as a whole. In Egypt it was the tool of a oligarchy.

16. "There were some incidental illusions in the Old Testament which tend to sho that there was a wide diffusion of the commercial spirit among the Israelites of old; the may be regarded as in advance of most of the neighboring nations in this respect. (Vol. p. 47)

17. "Western Civilization in its Economic Aspects," by W. Cunningham, London, 192 Vol. I, p. 47.

18. "Money and Monetary Policy in Early Times," by A. R. Burns, London, 1927; p. 33

19. pp. 20, 21.

20. "The Laws of Moses and the Code of Hammurabi," by Stanley A. Cook, Londo 1903; p. 232.

21. "Western Civilization in its Economic Aspects," by W. Cunningham, London, 192 Vol. I, p. 14.

22. "All of this work, with such great bodies of men, would require astonishing sk of organization, or they would crowd hopelessly in so limited a ground. Much nonser has been written about the oppression of the people, their tears and groans. With t splendid organization evident in the work, the people must have been well managed, a there was no hardship whatever in carrying out the work. Each man might be levi twice in his lifetime; he would be just as well off there as at home, for he could nothing during the inundation. All that was necessary was to transport a couple hundredweight of food with him, which he would eat there instead of at home. T immense gain to the people was the education in combined work and technical trainii Such skill in united action continued, as in the transport of immense weights, and unc the Ptolemies, when 4,000 rowers must have kept perfect time together in rowing immense ship which Athenaeus describes." Prof. W. M. Flinders Petrie. ("Social Life Ancient Egypt," London, 1923; pp. 26-27.)

23. "Western Civilization in its Economic Aspects," by W. Cunningham, London, 19 Vol. I, p. 19.

24. "The Dawn of History," by J. L. Myers, London, p. 71.

25. "Social Life in Ancient Egypt," W. M. Flinders Petrie, London, 1923; pp. 9-10.

26. "Western Civilization in its Economic Aspects," by W. Cunningham, London, 19 Vol. I, p. 19.

27. "Modern Finance," Emile Burns, London, 1922; pp. 33-34. Mr. Emile Burns, author of this essay on "Modern Finance," is not to be confounded of course w Mr. A. R. Burns, whose book on "Money and Monetary Policy in Early Times," has b referred to in this chapter.

28. Ibid., p. 35.

29. "Encyclopædia Britannica," New York, 1910; Vol. VI, p. 793.

CHAPTER III

1. "Industrial Evolution," by Carl Bücher (Wicketts Translation), New York, 1893; p. 60-68.
2. "Outline of History," by H. G. Wells, London, 1920, p. 470.
3. "Industrial Evolution," by Carl Bücher (Wicketts Translation), New York, 1893, p. 60-68.
4. "The Encyclopædia Britannica," New York, 1910; Vol. XVIII, p. 696.
5. "Industrial Evolution," by Carl Bücher (Wicketts Translation), New York, 1893; p. 60-68.
6. "Western Civilization in its Economic Aspects," by W. Cunningham, London, 1924; Vol. II, p. 79.
7. "Has the Standard Gold Dollar Appreciated?", *Journal of Political Economy,* September, 1893; pp. 503-58.
8. "Origin of Currency and Weight Standards."
9. Ibid.
10. "Money and Monetary Policy in Early Times," by A. R. Burns, London, 1927.
11. Ibid., p. 11.
12. "Evolution of Modern Money," by W. W. Carlile, London, 1901; p. 238.
13. "The Ancient Egyptians and the Origin of Civilization," by Elliott Smith, London, 1923; p. 206.
14. Ibid., p. 206.
15. Ibid., p. 207.
16. "Les Origines de la Monnaie"; p. 230.

CHAPTER IV

1. "Money, Trade and Industry," by Walker; p. 6.
2. "Money and the Mechanism of Exchange," by Stanley Jevons, New York, 1892; p. 248.
3. "Money and Monetary Policy in Early Times," by A. R. Burns, London, 1927; p. 464.
4. *National Geographic Magazine,* December, 1927; p. 745.
5. *Journal of the Anthropological Institute of Great Britain;* XVII, pp. 314, 316.
6. "Origin of Currency and Weight Standards," by William Ridgeway, Cambridge, 1892; p. 20.
7. Ibid., p. 21.
8. Adapted from "Money and Banking," by Horace White, New York, 1895.
9. "Tribes of California," Powers; p. 21.
10. Adapted from "Money and Banking," by Horace White, New York, 1895.
11. "Origin of Currency and Weight Standards," by William Ridgeway, Cambridge, 1892; p. 17.
12. "History of China," by Du Halde; II, p. 288.
13. *cf.* Avebury's "Short History of Coins and Currency," London, 1902.
14. "History of Money in Ancient Countries," by Del Mar, London, 1885; p. 150.
15. Herodotus; Bk. I, par. 94.
16. Cf. Dodd's "History of Money in the British Empire and the United States," London, 1911; p. 229.

17. Adapted from "Money and Banking," by Horace White, 1895.
18. "The Island of Stone Money," by W. F. Furness, Philadelphia, 1910.

CHAPTER V

1. "Cambridge Ancient History"; III, p. 542.
2. "The Outline of History," H. G. Wells, London, 1920; p. 233.
3. "Money and Monetary Policy in Early Times," by A. R. Burns, London, 1927; p. 8
4. Ibid., p. 80.
5. "Republic"; Bk. II, p. 242.
6. "Laws"; Bk. V, p. 313.
7. "Monetary Theory Before Adam Smith," A. E. Monroe, Cambridge, Mass., 192
p. 13.
8. "A History of Money in Ancient Countries," A. Del Mar, London, 1885; p. 163.
9. Ibid., p. 163. Del Mar here adds the note: The discredited story in Herodotus, III-5
would imply that gold was used for some purposes by the Lacedaemonians in the tim
of Polycrates of Samos (about B.C. 540), or else it could not have been reported that th
had accepted such money from that monarch to raise the siege of Samos.
10. Ibid., p. 22.
11. Ibid.
12. "Revenues"; I, 3.
13. "Money and Monetary Policy in Early Times," A. R. Burns, London, 1927; p. 29
14. Ibid., p. 376.
15. Ibid., p. 377.
16. Ibid., p. 378.
17. Ibid., p. 365.
18. Katherine Fullerton Gerould, *Harpers Magazine,* February, 1929.
19. "The Outline of History," London, 1920; p. 234.
20. Ibid., p. 234.
21. "The Science of Money," A. Del Mar, London, 1885; p. 33.
22. Arbuthnot, regarding the denarius as one-seventh of an ounce, made the weig
relation 840 to 1. Adam ("Roman Antiq.") says 1,000 for 1.
23. Boeckh, "Polit. Econ. Athen."; p. 44.
24. "History of Money," A. Del Mar, London, 1885; pp. 183-185.
25. p. 33.
26. "The Evolution of Modern Money," W. W. Carlile, London, 1901; p. 35.
27. Ibid., p. 44.
28. Ibid., pp. 46-47.
29. Ibid., p. 47.
30. *Journal of the Institute of Bankers;* p. 16.
31. "A History of Money," A. Del Mar, London, 1885; pp. 186-187.
32. Papyrus was not used in Rome until after the time of Alexander the Great;
parchment until the Ptolemies began to reign in Egypt. They were both unsuited
money symbols. See Adams, "Roman Antiquities"; pp. 438-40.
33. "A History of Money," A. Del Mar, London, 1885; p. 331.
34. Ibid., p. 33.
35. "Cambridge Mediæval History," London, 1911; pp. 1, 39-40.
36. Ibid., p. 91.

37. "A History of Greece," London, 1877; I, p. 52.
38. "Money and Monetary Policy in Early Times," A. R. Burns, London, 1927; p. 412.
39. Ibid., p. 422.
40. "Western Civilization in its Economic Aspects," W. Cunningham, London, 1924.
41. p. 58.
42. "Roman Life and Manners Under the Early Empire," Ludwig Friedlander, Lon-
n; p. 26.

CHAPTER VI

. Adapted from "The Sufficiency of Our Present Currency System," Sound Currency; 1903, 61-63.
. Adapted from "Principles of Political Economy" (Veditz Translation and Adaptation), ndon; pp. 219-22.
. "Principles of Money and Banking," H. G. Moulton, Chicago, 1916; p. 89.
. "Money and Civilization," A. Del Mar, London, 1886; p. 60-61.
. Ibid., pp. 194-5.
. Ibid., p. 183.
. "Money," Professor Lehfeldt.
. "Money," Encyclopædia Britannica, New York, 1910.
. "Money Credit and Commerce," Professor Marshall, London, 1923; p. 20.
0. "Money and Civilization," A. Del Mar, London, 1886; pp. 211-12.
1. "A Short History of Mercantilism," J. W. Horrocks, New York; p. 15.
2. Ibid., p. 17.

CHAPTER VII

. See Lord d'Aberon's description of the failure of the Germans when the mark was ng to nothing to realize that this was not a rise in commodities caused by profiteer- etc.
. New English Dictionary.
. "Principles of Money and Banking," H. G. Moulton, Chicago, 1926.
. "Money," Boston, 1927.
. p. 113.
. "England's Treasure by Forraign Trade," London, 1669; p. 11. But it would be to misunderstand Mun by making "treasure" equivalent to our idea of the word alth."
. "The Economic Interpretation of History," J. E. Thorold Rogers, London, 1888; 87.
New York, p. 37.
. "A Short History of Mercantilism," J. W. Horrocks, New York; pp. 101-2.
0. "Capital and Finance in the Age of the Renaissance," Richard Ehrenburg, London, 3; p. 33.
1. New York, 1922; p. 110.
2. "The Fruits of Victory," New York, 1920.
3. "If Britain is to Live," London, 1923; p. 21.
4. Address to the Foreign Policy Association. Published in Pamphlet No. 51, New k, 1928.

15. "The Evolution of Modern Money," W. W. Carlile, London, 1901; p. 328.
16. "The Fugger News Letters," 1568-1605, London; pp. 160-63.
17. Gibbon; I, 441. From John of Antioch.

CHAPTER VIII

1. London, 1928; pp. 21, 43.
2. London, 1926; p. 43.
3. Letter 53.
4. "Usury," Encyclopædia Britannica, New York, 1910; Vol. XXVII.
5. "Religion and the Rise of Capitalism," R. H. Tawney, London, 1926; p. 35.
6. "Monetary Theory Before Adam Smith," A. E. Monroe, Cambridge, Mass., 19
p. 20.
7. Ibid., p. 29.
8. "Capital and Finance in the Age of the Renaissance," R. Ehrenburg, London, 19
p. 42.
9. "Religion and the Rise of Capitalism," R. H. Tawney, London, 1926; p. 54.
10. Ibid., p. 42.
11. Ibid., p. 42.
12. Ibid., p. 180.
13. "Western Civilization and its Economic Aspects," W. Cunningham, London, 19
Vol. II, pp. 173-4.
14. "The Economic Interpretation of History," J. E. Thorold Rogers, London, 18
p. 207.
15. "Western Civilization and its Economic Aspects," W. Cunningham, London, 19
Vol. II, p. 88.
16. "Capital and Finance in the Age of the Renaissance," R. Ehrenburg, London, 19
pp. 48-49.
17. "Western Civilization and its Economic Aspects," W. Cunningham, London, 19
Vol. II, p. 84.
18. Ibid.
19. "A Discourse Upon Usury," Thomas Wilson. (Edited by R. H. Tawney) Lond
1925; p. 86.
20. S. P. D. Eliz. CVI, No. 6.
21. "Western Civilization and its Economic Aspects," W. Cunningham, London, 19
Vol. II, p. 79.
22. "Religion and the Rise of Capitalism," R. H. Tawney, London, 1926; p. 35.

CHAPTER IX

1. It is possible that a medium of exchange, the value of which depended on
credit of the issuer, had developed before coins were invented. In Babylonia and Cha
in the ninth and eighth centuries B.C., instruments very like bills of exchange are know
have existed. They were inscribed on clay bricks, and were drawn by one perso
another in a different place for a sum expressed in weights of silver and copper.
were payable after a stated period, interest sometimes being provided for. No end
ment or acceptance appears; but as the bill was drawn on the clay when it was soft

en baked, subsequent inscription would have been difficult. ("Money and Monetary licy in Early Times," A. R. Burns, London, 1927; p. 284.)
2. "The Wealth of Nations," Adam Smith; Bk. IV, Chap. III.
3. See E. Lattes, *La Liberta delle banche a Venezia dal secole XIII al XVII secondo i cumenti inediti del R. Archivo dei Frari* (1869), pp. 26-29; F. Ferrara, "Gli antichi nchi di Venezia," in *Nuoya Antologia,* XVI (1871), pp. 435-466; and P. Huvelin, *Droit des Marches et des Fiores* (1897), pp. 534-537.
4. "The Bank of Venice," C. F. Dunbar, *The Quarterly Journal of Economics* (1892), 310, and "Economic Essays" (1904), p. 145.
5. "History of Money in the British Empire and the United States," Agnes F. Dodd, ndon, 1911; pp. 19, 66-7.
6. "Western Civilization in its Economic Aspects," W. Cunningham, London, 1924; l. II, p. 86.
7. Ibid.
8. "Capital and Finance in the Age of the Renaissance," R. Ehrenburg, London, 1928; 56.
9. *The Economic Journal,* January, 1919.
10. "Religion and the Rise of Capitalism," R. H. Tawney, London, 1926.
11. "A Discourse Upon Usury," Thomas Wilson. (Edited by R. H. Tawney), London, 5; p. 87.
12. From B. M. Lansd. MS., 12, fols. 28-29. Even so early as 1561 a loan of £30,000 10 per cent was raised for Elizabeth in London. This sum was obtained from twelve glishmen. S. P. Dom., Eliz. 19, 2.
13. "Capital and Finance in the Age of the Renaissance," R. Ehrenburg, London, 1928; 56.
14. Ibid., p. 237.
15. "Hanseatic League," Encyclopædia Britannica, New York, 1910.
16. "Religion and the Rise of Capitalism," R. H. Tawney, London, 1926; p. 76.
17. "History of Money in the British Empire and in the United States," A. F. Dodd, don, 1911; pp. 70, 71, 72.
18. "Religion and the Rise of Capitalism," R. H. Tawney, London, 1926; pp. 77-8.
19. Ibid.
20. Ibid.
21. Ibid.
22. "Capital and Finance in the Age of the Renaissance," R. Ehrenburg, London, 1928; 8; p. 64.
23. Ibid., p. 152.
24. Ibid.
25. London, 1926; pp. 395, 406-408.
26. "The Reign of the House of Rothschild," Count Corti. London. V. Gollanz; xii, 511.
27. *The London Times,* April 20, 1928.

CHAPTER X

1. "Principles of Political Economy and Taxation," 1918; p. 341.
2. Ibid., p. 341.
3. "Principles of Money and Banking," H. G. Moulton, Chicago, 1916; p. 135.

4. "Dialogue on Riches."
5. "A History of Money in Ancient Countries," A. Del Mar, London, 1815; pp. 174
6. Ibid., p. 10.
7. Ibid., pp. 28-29.
8. "Travels," of Sir John Mandeville. (Ed. 1839), p. 239.
9. "A History of Money in Ancient Countries," A. Del Mar, London, 1885.
10. "Lombard Street," London, 1910; p. 89.
11. "Money," Hartley Withers, London, 1927; p. 37.
12. "History of Money in the British Empire and the United States," Agnes F. Do London, 1911; p. 121.
13. "Encyclopædia Britannica," New York, 1910; Vol. XVI, p. 297.
14. This is an account as given by Del Mar, who seems to have examined the proj carefully.
15. "History of Money in the British Empire and the United States," Agnes F. Do London, 1911; pp. 235-5.
16. "The Monetary History of the United States," Horace White, London, 19 pp. 64-65.
17. "History of the American Revolution" (1789), David Ramsay; II, 134-5.
18. Written to Seignelay, Minister of Marine.
19. *Century Magazine,* XLII (1891); pp. 151-52.

CHAPTER XI

[References in text of Chapter.]

CHAPTER XII

1. Adapted from "Washington's Notes" in *Journal of Political Economy,* xii, 1 pp. 484-97.
2. Ibid.
3. Quoted from *First Annual Report of the Federal Reserve Board,* December, 1 pp. 17-18.
4. *Money,* Hartley Withers, 1927; p. 45.
5. Ibid.
6. *New Republic,* September 28, 1927.
7. *New Republic,* February 15, 1922.
8. *Foreign Affairs,* an American quarterly. July, 1922.
9. L. W. S. in the News Bulletin of the Foreign Policy Association. March 22, 19

CHAPTER XIII

1. "Republican Germany," by Hugh Quigley and Robert T. Clark, London, 1928.
2. T. E. Gregory of the London School of Economics in the Encyclopædia Brita Supplementary Volumes, 13th edition. A good brief account of how the War was fin

CHAPTER XIV

1. "Profits," Boston, 1925; p. 409.
2. Karl Helfferich, "Money," translated from the German by Louis Infield, London, 927; Vol. II, p. 547.
3. "Gold Prices and Wages," London, 1913; p. 115.
4. The report has been reprinted under the title of "The Paper Pound of 1797-1821," ith an introduction by Edward Cannon, London, 1919.
5. "Profits," Foster and Catchings, Boston, 1925; p. 306. Mr. J. A. Hobson has a mparable criticism of price fluctuation in "The Economics of Unemployment," London, 922; p. 79.
6. "Stabilizing the Dollar," New York, 1920; p. 76.
7. Gustav Cassel, "Das Stabilisierungs Problem," Leipzig, 1926; p. 46.
8. "Currency and Credit," R. G. Hawtrey, London, 1919; p. 374.
9. "Modern Monetary Systems," Bertrand Nogaro, London, 1927; p. 176. Georg Knapp, The State Theory of Money," translated from H. M. Lucas and J. Bonar, London, 1924; 218. *cf.* J. A. Hobson, "Gold Prices and Wages," p. 87, and "The Industrial System," ondon, revised edition, 1927; pp. 275 and 277.
10. "Stabilizing the Dollar"; p. xxvi.
11. "Money"; p. 141.
12. "Wirtschaft and Statistik," 1927, No. 15, quoted by Felix Mlynarski, "Gold and entral Banks," New York, 1929; p. 2.
13. Ibid., p. 14.
14. *cf.* J. M. Keynes, "Monetary Reform," New York, 1924; p. 153.
15. "The World's Monetary Problems;" two Memoranda written for the League of ations. London, first published 1921; p. 134.
16. "Controlling the Output of Gold," London, 1926; p. 20.
17. "Money"; p. 144.
18. "Monetary Reform"; pp. 201-213.
19. Ibid., pp. 201-213.
20. "Influence of the Rate of Interest on Prices," Knut Wicksell, *Economic Journal,* ne, 1907.
21. Speech delivered on January 27, 1925, reproduced in "Post-War Banking Policy," ondon, 1928; p. 99.
22. Professor G. N. Lewis, "A Plan for Stabilizing Prices," *Economic Journal,* March, 925.
23. "Stabilizing Production by Means of Reserves," N. T. Bacon, *American Economic eview,* March, 1924.
24. "The Invariable Standard and Measure of Value," J. Taylor Peddie, London, 1928; 225.
25. "Money," Cambridge, England, revised edition 1928; pp. 137-140.
26. "High Prices and Deflation," E. W. Kemmerer, Princeton, 1920; p. 81.
27. "The Return to Gold," London, 1925; pp. 21-22.
28. "Money," London, 1926; p. 105.
29. "Modern Monetary Systems"; p. 158.
30. "Post-War Banking Policy"; p. 99. *cf.* Report of the Royal Commission on Indian urrency and Finance. Cmd. 2687. H. M. Stationary Office, 1926; p. 24.
31. H.R. 11788, Sixty-seventh Congress, second session.

32. "Stabilizing the Dollar," New York, 1920, p. 104.
33. See for instance, D. J. Tinnes, "The Market Gage Dollar," *American Econom Review*, September, 1918, and "An American Standard of Value," *American Econom Review*, June, 1919; and Willard C. Fisher, "Tabular Standard in Massachusetts History *Quarterly Journal of Economics*, May, 1913.
34. "Stabilization of Prices," New York, 1928, p. 87.
35. "Money"; p. 107.
36. "Money"; p. 149.
37. "The Stabilization of Gold: A Plan," *American Economic Review*, June, 192 pp. 283-285.
38. "Monetary Stability." London, 1925; p. 157.
39. "Monetary Reconstruction," R. G. Hawtrey, New York, 1923; pp. 61-65.
40. "The Restoration of the Gold Standard," *Economica*, November, 1923; p. 185.
41. "Post-War Monetary Stabilization," New York, 1928; p. 96.
42. Hearings before the Committe on Banking and Currency, House of Representativ 69th Congress, 1st Session, on H.R. 7895. The evidence for and against the Amendme is summed up in Chap. xi of "Stabilization of Prices," by J. S. Lawrence.
43. "Money: Its Connection with Rising and Falling Prices," London, 5th editi revised, 1926; p. 85.
44. "Influence of the Rate of Interest on Prices," Knut Wicksell, *Economic Journ* June, 1907.
45. "Money"; p. 568.
46. "Money and Foreign Exchange After 1914," New York, 1922; p. 106.
47. "Stabilization of Prices," Lawrence; p. 463.
48. "Gold Prices and Wages," p. 156.
49. "The Interest Standard of Currency," Ernst Dick, London. First published 19 p. 169.
50. "Real Wealth and Financial Poverty," Captain W. Adams, London, 1925; p. 249.
51. "Economics of Unemployment"; p. 83.
52. "Profits"; pp. 330-331.
53. "Stabilization of Prices"; p. 420.

54. Anna Youngman, "The Efficacy of Changes in the Discount Rates of the Fed Reserve Banks." *American Economic Review*, September, 1921.

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